


EDWARD CHARLES ELLIOTT, MANFRED JAMES HOLMES,
NATIONAL SOCIETY FOR THE STUDY OF EDUCATION



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The Education and Training of Secondary Teachers

Edward Charles Elliott, Manfred James
Holmes, National Society For The Study
Of Education

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THE FOURTH YEARBOOK

OF THE

NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

PART I

THE EDUCATION AND TRAINING OF SECONDARY TEACHERS

BY

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EDITED BY

MANFRED J. HOLMES

SECRETARY OF THE NATIONAL SOCIETY

MEETINGS FOR THE DISCUSSION OF THIS YEARBOOK WILL BE HELD AT 4:00 P.
MONDAY AND WEDNESDAY, FEBRUARY 27, AND MARCH 1, 1905
THE PLANKINGTON HOTEL, MILWAUKEE

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THE FOURTH YEARBOOK

OF THE

NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

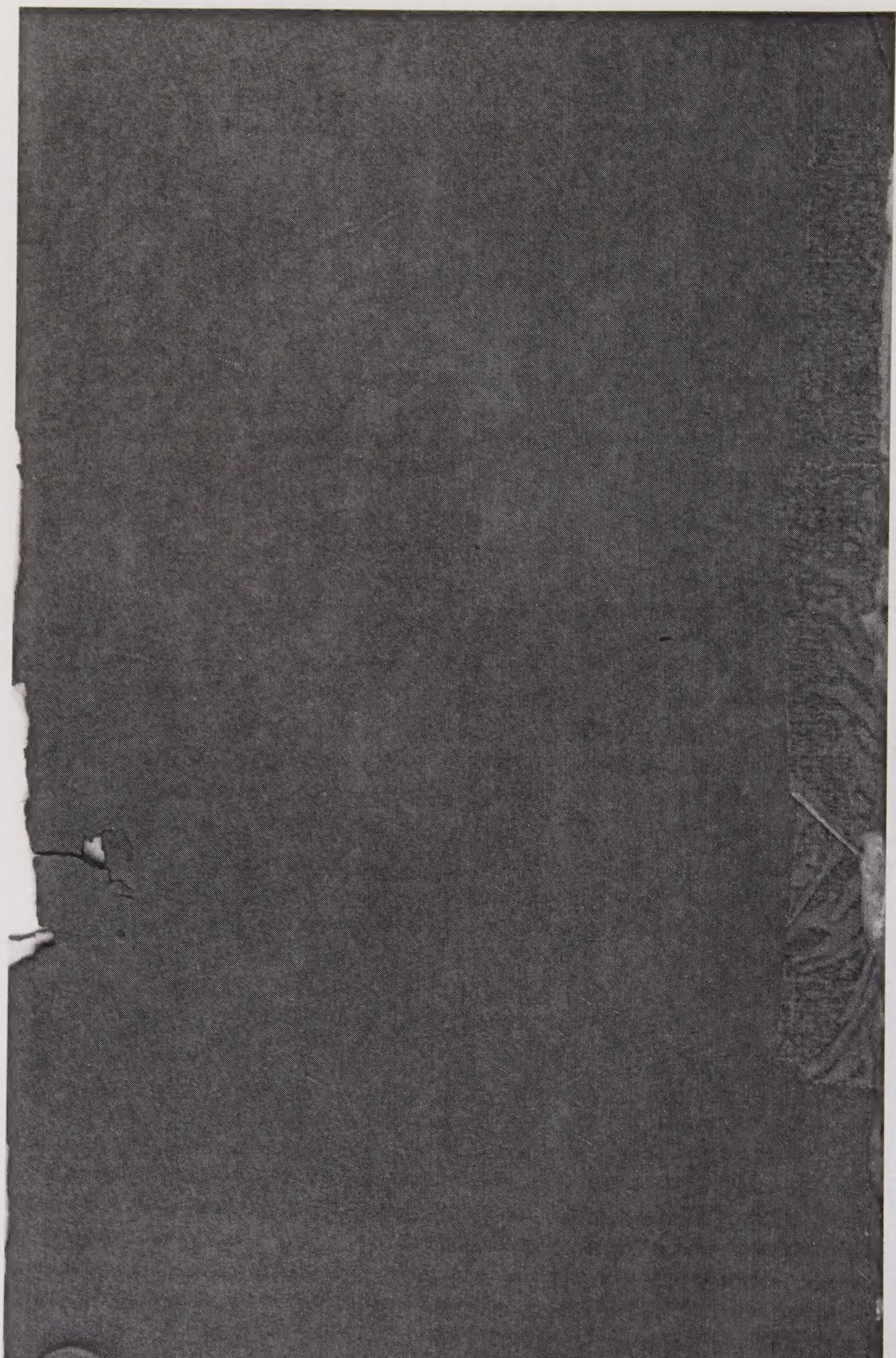
PART I

THE EDUCATION AND TRAINING OF SECONDARY TEACHERS

"The education of the secondary teacher should be professional as well as academic. The opinion is still prevalent that the elementary teacher needs special training, but that the secondary teacher is such by the grace of God and the authority of one's alma mater."
—W. H. BURHAM, in *School Review*.

The American secondary school, in accordance with the law of all institutional genesis, has been called into existence to serve some deep-felt want of the people. What is just the service that this particular school should render? How can it be made to render this service in the maximum degree? Whatever else is necessary, it is clear that the most vital and determining factor, the one upon which all the others depend for their effectiveness, is the Teacher. The greatest and most pressing problem then is: How secure the most efficient teachers for our secondary schools?

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MONDAY, FEBRUARY 27, AND WEDNESDAY, MARCH 1, 1905, AT
4:00 P. M., PLANKINTON HOTEL, MILWAUKEE





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ANNOUNCEMENTS TO ACTIVE MEMBERS

A great deal of interest is awakened in the question of preparing secondary teachers. It is hoped that we shall get something thoroughly good and helpful from the discussion and conferences at Milwaukee.

One characteristic of our Society should be clear, frank discussion, vigorous and progressive. This is impossible unless the *Yearbook* is studied before the meetings.

Several rules that the experience of the Society has led it to adopt will be applied by the presiding officer whenever necessary or advisable; for instance, none but active members have the privilege of discussion in meetings except through the courtesy of the Society or its officers; preference is given to members who have read the *Yearbook*; it is the right and duty of the presiding officer to hold the discussion to the topic under consideration; he may divide the question and take up the topics in a progressive order; also the presiding officer may in advance or at the meeting invite guests to participate in discussion.

At the Wednesday session a few ten-minute reports setting forth the problems and indicating the progress of work that members are specifically engaged upon will be received. If it should prove advisable, and acceptable to all concerned, these reports may be presented at an extra session for that purpose. This is one of the ways by which intelligence and interest concerning what members are doing may be promoted.

Arrangements have been made to bring together at an informal dinner Wednesday evening as many members as possible. For this purpose a part of the dining-hall at the Plankinton Hotel will be set aside at the regular dining hour, but with special service. To those who are registered at the Plankinton on the American plan there will be no extra cost; the cost to others will be \$1.00 a plate.

All wishing to join in this should notify President Charles McKenny, Milwaukee, or the Secretary.

The business meeting will take place at the Wednesday session. The items of business so far as known now are:

Report of the Secretary-Treasurer.

Election of officers.

Better organization of the society for work.

Shall the National Society affiliate with the American Association for the Advancement of Science?

Proposal of topics for the next two years. Each member ought to suggest a topic and the person who can deal with it ably.

Election of active members. Active members are requested to hand in their nominations for membership as early as possible. The time has come when new members should be selected with care.

All the sessions will be held in the Arcade of the Plankington Hotel.

It is understood that membership continues until a member notifies the Secretary of withdrawal.

Any change of address or official position should be reported promptly. Otherwise, Yearbooks and communications will fail to reach members.

Now and hereafter membership dues are payable to the Secretary-Treasurer.

M. J. HOLMES,
Secretary.

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INTRODUCTION

Our secondary schools, in accordance with the law of all institutional genesis, have been called into existence by certain needs of the people. The vigorous and rapid growth of these schools during the last few years has awakened a keen and serious sense of their great and increasing meaning in local and national life. But it is already clear that though these schools are loaded with promise of valuable contribution to the national well-being, they can never render their possible maximum of service without the aid of a larger proportion of happily adapted and especially prepared teachers. The importance of this thought has no doubt led the National Society to select the present subject for study.

The two central ideas which are both starting-point and culmination of thought in the study are (1) what constitutes the ideal secondary teacher? and (2) by what selective process and preparation can we best promote the realization of this ideal? But to give proper logical setting and to reveal more clearly the large meaning of the central questions the general subject has been divided as follows:

Division I is a historical sketch which seeks to trace in brief compass the genesis of our secondary schools in their relation to the life of the people. With a renewed sense of the vital importance of our secondary schools the thought then moves on to

Division II, which, recognizing that the most important factor in enabling these schools to yield their maximum of value, presents the opinions of five experienced secondary-school men as to what constitutes the ideal secondary teacher.

Division III. To get some idea of the extent to which the actual secondary teacher of today comes up to the standard called for in the ideal, this division examines the present status and personnel of secondary teachers in the United States.

Division IV examines the present provision for the preparation of secondary teachers made by universities, normal schools, and colleges; it considers the nature of the preparation and the extent to which these schools are meeting the demand for more and better-prepared teachers for our secondary schools; and lastly it presents

a consensus of opinion as to how universities and normal schools can improve in this matter of preparing secondary teachers.

Division V. Finally, the present status of the whole problem and need of more and better-prepared high-school teachers demands that the universities and normal schools come to a sense of their common ground in this work, and consider what each can do best, and seek a way to improve. Therefore Division V sets forth the relative advantages and limitations of universities and normal schools in preparing secondary teachers in so far as a consensus of opinion can do this. This presentation of opinion neither implies nor reveals controversy between normal schools and universities. In some cases it shows the need of better mutual understanding and appreciation concerning their relation to the common problem of furnishing well-prepared teachers for our schools. The central idea is not universities *vs.* normal schools, but universities *and* normal schools in their relation to the education of teachers.

With the study of the general question thus opened up, the plan looks forward to the appointment of one or more representative committees to carry on the study and report what seems necessary and best for the several classes of schools concerned to attempt in the preparation of secondary teachers.

THE FOURTH YEARBOOK

I

THE GENESIS OF AMERICAN SECONDARY SCHOOLS IN THEIR RELATION TO THE LIFE OF THE PEOPLE¹

EDWARD C. ELLIOTT
Columbia University

The development of American education contains the conscious expression of a people ever seeking to realize within themselves the significance of human freedom and of national unity. It discloses the process of the social ideals becoming institutionalized, thereby serving to perpetuate the spirit of a true democracy and to attain to advancing degrees of social efficiency.

Each of the tripartite divisions of our educational system — elementary, secondary, and higher — has had, as it were, a distinct life-history; each has exhibited continuous variation of form, structure, and function in response to advancing social needs; each has served in its own way to contribute to the larger social purpose. The history of our secondary schools affords the best evidence of this evolution of an educational activity in the process of social accommodation. In one form or another they have stood throughout almost three centuries, and have reflected, more truly than elementary or higher schools, the social condition and the progressive stages of our people toward liberty, efficiency, and toleration.

The purpose of this paper is to sketch, so far as can be done within the brief limits assigned, the development of secondary education in our country with particular reference, (1) to the connection between

¹ For much of the material contained in this paper, the author is indebted to that invaluable work of Professor Elmer E. Brown, *The Making of Our Middle Schools*, which places every student of any phase of our secondary education under indebtedness. Professor Paul Monroe, of the Teachers College, Columbia University, has also given many valuable suggestions and has rendered much timely assistance in its preparation.

the schools and the social life of the people, and (2) to the qualifications required of the teachers.

The origin of our secondary schools is to be found in the classical renaissance of the fifteenth and sixteenth centuries. The humanistic educational tendencies resulting therefrom were transplanted by the early American settlers to all of the thirteen colonies, save one, and by them elaborated into a distinct type of schools, though, for a century and a half, with scarcely any modifications on account of the novel conditions. During the latter half of the eighteenth century, coincident with the radical social and political changes of that period, a new type of institution sprang up, very similar to a new type of secondary schools in Europe, but far more responsive to and expressive of American conditions than had been the previous schools. These schools dominated until the Civil-War period, by which time our present secondary schools, which first appeared early in the second quarter of the century, became numerous enough to indicate their superiority. This third type of secondary schools is wholly an American product, and one expressive of the needs and the ideals of our civilization. These same general periods of development are evident in the history of elementary and higher education as well, but they are more clearly marked in that intervening stage, now usually designated as secondary education.

THE GRAMMAR-SCHOOL PERIOD

The typical secondary school, practically the only school of this rank during the colonial period, was the Latin grammar school, more frequently known as the grammar school. These schools were similar to the public schools of England and the early gymnasia of the Teutonic people of the continent. An outgrowth of the renaissance of the fifteenth and sixteenth centuries, these classical schools had been seized upon by both Protestant and Roman Catholic communities as the chief instrument for combating ignorance among their own communions and heresy among those outside. It is but natural that the American settlers, as they transplanted other European institutions, should transplant these. And as such schools had a peculiar religious significance in Europe, it was but natural also that they should be most thoroughly developed in those colonies where the religious motive was a prominent one.

In the consideration of the question at hand, it must be kept in

mind that our conclusions must be based largely upon evidence of an indirect, rather than of a direct, kind. In the absence of settled social conditions, or of a recognized common social ideal, each colony provided grammar schools and teachers thereof in a way best adapted to immediate needs. Choice of a teacher was dependent upon religious or local prejudice. Professional standards of teachers were judged more from results than from academic qualifications. In general, the problem was to secure a teacher — a good one, if possible; a poor one, if need be; but at any rate, a teacher. The ambition of these early colonists was for schools which would guarantee to the children and their children's children the training necessary to the stability of the church and commonwealth. The new ideals of the new world had been too dearly bought to permit them to die out for want of nourishment.

As the earliest and best of its type we may accept the Boston Latin School as throwing some light upon the character of the colonial schoolmaster. What may be said as to it will apply with equal force to the other and numerous schools of like grade established by those enthusiastic Puritans.

The purpose of this school, practically from the time of its establishment, was to prepare boys for entrance to Harvard College. The professed aim of Harvard was to raise up a new generation of ministers. The interests of the Latin school were the interests of the college; the condition of one reflected the condition of the other. This early Massachusetts school system was clearly intended to train the leaders of the ecclesiastical commonwealth.

With its English inheritance of form, function, and ideals the early masters of the Boston Latin School possessed the personal qualifications and that scholastic preparation which had held for generations in the mother-country — the classical education of the English universities. A knowledge of Latin and Greek was the prime requisite, more Latin than Greek, for Latin practically comprehended the curriculum of this grammar school, not only when Ezekiel Cheever was preparing his boys for entrance to Harvard College, but for a century to follow.

When any scholar is able to understand Tully, or such like Classicall Latine Author *Extempore*, and make and speake true Latine in Verse and Prose, *sus ut aiunt Marti*; and decline perfectly the paradigm's of *Nounes*, and Verbes in the Greek tongue; let him then and not before be capable of admission into the Colledge.

Of Elijah Corlett's grammar school in Cambridge it is recorded:

And by the side of the Colledge a faire *grammar Schoole*, for the training up of young Schollars, and fitting them for *Academicall Learning*, that still as they are judged ripe, they may be received into the Colledge of this Schoole. Master *Corlet* is the Mr. who has very well approved himselfe for his abilities, dexterity and painfullnesse in teaching and education of the youth under him.²

Later when a new generation of teachers came to take the place of Cheever, Corlett, and their prototypes, we find the graduate of Harvard College—the first product of the new intellectual life—recognized as fit to direct the education of those preparing to follow in the same path as he himself had traveled. The new master of the grammar school was the college graduate who viewed the careers of his pupils through the glasses fitted by his own ecclesiastical preparation.

Mr. Martin in his work on the Massachusetts public-school system has told us, and with full justification, that

The teachers of the earlier schools were men, and men of no ordinary capacity and experience. Some of them had been clergymen. All were scholars, and most of them had been educated at old Cambridge. As soon as the infant college at new Cambridge began to bear fruit, to the honor of the pious Harvard, its graduates found places in the schools as well as in the churches.³

And further,

It would be too much to say that all the early masters were like Cheever, but they were all scholarly after the fashion of the times, and all deeply imbued with that religious spirit which characterized the Puritan epoch. Their whole training tended to this. Their college studies were the studies of the divinity school. There was some mathematics—arithmetic and geometry, some natural science—physics and astronomy. All the rest was along the line of the humanities. Grammar and logic and rhetoric; politics and ethics; Chaldee, Hebrew, and Syriac; biblical and catechetical divinity—all this wealth of learning was at the service of the children.⁴

Those early schoolmasters of New England who have come down to us by reason of their dominating personality scarcely represent the true type. Our best evidence concerning the typical schoolmaster—indirect though it may be—must be drawn from the early statutes

² *New England's First Fruits*; quoted by Brown in *The Making of Our Middle Schools*, p. 40.

³ Martin, *Evolution of the Massachusetts Public School System*, p. 61.

⁴ *Loc cit.*, p. 63.

passed to fix a professional standard. In how far these legal provisions were effective it would be well nigh impossible to indicate. They are presented as evidence, and their value may be determined from their several common elements.

In the famous Massachusetts Statute of 1647, the following appears:

. . . . and it is forthwith ordered that where any town shall increase to the number of 100 families or householders, they shall set up a grammar school, the master thereof being able to instruct youth so far as they may be fitted for the university,⁵

The resolution of the General Court adopted in 1654 on the occasion of the enforced resignation of President Dunster, of Harvard, owing to his stand taken on infant baptism runs:

For as much as it greatly concerns the welfare of this country that the youth thereof be educated, not only in good literature, but sound doctrine, this Court doth therefore commend it to the serious consideration and special care of the overseers of the College and the selectmen in the towns, not to admit or suffer any such to be continued in the office or place of teaching, educating or instructing of youth or child in the college or schools that have manifested themselves unsound in the faith or scandalous in their lives, and not giving due satisfaction according to the rules of Christ.⁶

Chapter 26 of the laws passed by the first Provincial Assembly of the Massachusetts Bay Colony in 1691 re-enacted that every town of one hundred families should set up a grammar school and procure for it a "discreet person of good conversation, well instructed in the tongues."

The following act of the Massachusetts legislature in 1701 is said to be the first compulsory certification of teachers known in our history.

Every grammar-school master to be approved by the minister of the town, and the ministers of the two next adjacent towns, or any two of them by certificate under their hands. And be it further enacted, that no minister of any town shall be deemed, held or accepted to be the schoolmaster of such town within the intent of the law.⁷

⁵ Clews, *Educational Legislation and Administration of the Colonial Governments*, p. 62.

⁶ *Records of the Governor and Company of the Massachusetts Bay in New England*, Vol. IV, Pt. 1, pp. 182, 183. Quoted by Clews, *op. cit.*, p. 21.

⁷ *The Acts and Resolves of the Province of Massachusetts Bay*, Vol. I, p. 470. Quoted by Clews, *op. cit.*, p. 65.

The preceding paragraphs have had to do specifically with the grammar schools of Massachusetts. Not only is our information as to the early schools of this state most reliable and complete, but the example set by her in her educational plan was imitated to a greater or less degree in the other colonies with an educational history. Her story is the composite story of all. The other colonies had grammar schools, fashioned in the same mold as those of Massachusetts. They had grammar-school masters whose works, if not biographies, fill an important place in our early educational history. However, the study of individuals is not broad enough for our present purpose. We must turn to the legislation of the different colonies if we are to gain a glimpse of the broader social endeavors to set a professional qualification for grammar-school teachers.

When the matter of a colony grammar school was being agitated in New Haven in 1660 we find that a schoolmaster was to be provided to teach Latin, Greek, and Hebrew, "so far as shall be necessary to prepare them [the scholars] for the college."⁸

In 1672 the General Court of the colony of Connecticut revised the Code of 1650, with the following provision for secondary education, "That in every county town there shall be set up and kept a grammar school, for the use of the county [the colony had been divided into four counties] the master thereof being able to instruct youths so far as they may be fitted for the college."⁹

In 1690, the General Court of the same colony considering the necessity and great advantage of good literature, do order and appoint that there shall be two free schools kept and maintained in this colony, for the teaching of all such children as shall come there, after they can first read the psalter, to teach such reading, writing, arithmetic, the Latin and Greek tongues; the one at Hartford, and the other at New Haven, the masters whereof shall be chosen by the magistrates and ministers of the said County, and shall be inspected and again displaced by them if they see cause. . . .¹⁰

And thus, through frequent legislation, can be traced the effort of the colony of Connecticut to provide efficiently equipped secondary teachers and to control the character of this teaching. The evidence in the other colonies, while not so voluminous, is of the same general character. One typical example will serve our purpose here.

⁸ Clews, *op. cit.*, p. 85.

⁹ *Ibid.*, p. 93.

¹⁰ *Conn. Col. Records*, Vol. IV, pp. 30, 31; Clews, *op. cit.*, p. 96.

In 1752, the legislature of Virginia passed an act for incorporating the borough of Norfolk. The clause of this act concerning the qualifications of the schoolmaster is as follows :

and to provide and agree with an able master for the said school, capable to teach the Greek and Latin tongues, which said master, before he be received or admitted to keep school, shall undergo an examination before the masters of the College of William and Mary, and the minister of Elizabeth parish, for the time being, and produce a certificate of his capacity, and also a license from the Governor, or Commander-in-Chief of this dominion, for the time being, agreeable to his majesty's instructions.¹¹

The essential feature of this act, the examination by the minister of the parish, is repeated frequently in the later legislation of the colony.

Summing up, then, we have ample evidence from many sources, indirect though they may be, to justify the conclusion that, in the main, the Latin grammar schools were provided with teachers capable of preparing boys for entrance to the colonial colleges. In many, we might not say the majority, of cases these teachers were educated in the narrowly classical curriculum of the English or Scotch universities, or of the colonial collegiate institutions. Graduation does not appear to have been a prerequisite. "Knowledge of the tongues" seems to have been capable of the widest variety of interpretation. In all of the colonies ecclesiastical control and examination were exercised over the license to teach—in New England, by the local ministers; in the other colonies, nominally by the Bishop of London.

The schoolmasters of the colonial period may be roughly divided into three classes. There were a few men of scholarly preparation who made teaching the work of their lives, and kept up the best traditions of the free-school masters of Old England—of Mulcaster and Brinsley and Charles Hoole. Then there were young clergymen and ministers of non-Episcopalian denominations recently from college, who taught school while waiting for a call to the pastoral office. Finally there was a miscellaneous lot of adventurers, indented servants, educated rogues, and the like, all either mentally or morally incompetent, or both, who taught school only to keep from starving.¹²

In spite of honest efforts to maintain the old professional standards, through legislation and ecclesiastical supervision, we find

¹¹ *Official Records of Robert Dinwiddie*, Vol. VI, p. 265; *Clews, op. cit.*, p. 345.

¹² *Brown, The Making of Our Middle Schools*, p. 110.

even before the Revolution, a decline in the character of the Latin school. Local interest declined and local support diminished. The time seemed ripe for a new force to make itself felt in American education.

It may seem that too much attention has here been given to these colonial grammar schools. Nevertheless, a comparatively full treatment has been deemed necessary in order to obtain a fuller appreciation of the standards of the early period, standards which prevailed in reality, if not in name, for almost a century following the Revolution; and further, because legislative evidence concerning the qualification and preparation of teachers during the following period is very much less abundant, practically absent, for the states did little to foster the new type of schools.

THE ACADEMY PERIOD

From the Revolution to the Civil War our educational activity, in common with our political and social life in general, was characterized by decentralization in organization, an individualism in motive and in action, and a democratization of public opinion. When the democratic sentiment became fully conscious of itself during the Jacksonian period, there developed a realization that its needs might be more readily accomplished by a greater centralization of power and some restriction upon that individualism that allowed certain classes or individuals to obtain control of social opportunities. Hence from this period of about 1840 there is a marked tendency toward greater centralization in government, a more complete legal control of private activity, and an effort to prevent the control of opportunity through unrestricted private initiative which in educational activities is only fully revealed after the Civil War.

The characteristic features of this middle period in our educational history are quite clearly indicated in the condition of the elementary schools. Here the district school was typical and illustrated all of these general features more obviously than any other phase of educational life. Superseding the old town or township schools, supported and controlled by a comparatively large local unit, and acquiring conformity to some general standards of recognized integrity, the district school represented the extreme of decentralization, in that it gave the control of the school into the hands of the smallest possible local unit; the extreme of individualism, in that each locality con-

trolled, without any general supervision, the character and content of the work of its own school, and in that each pupil even determined his own choice of subjects, or the method of study of the subjects by the books he might be able to bring to the school; and the extreme of democracy, in that little emphasis was placed upon any but the most rudimentary subjects, and the entire tendency was thus to reduce all to a common level and that a low one.

In a similar way, the secondary school of the period expressed very clearly this response of education to changed social conditions. The old Latin grammar schools with their public support and central control, rigid and restricted curriculum, and class or professional patronage, were replaced very rapidly and generally by the academy. In a very complete way the academies were an expression of decentralized control. For the most part they were purely private, or at best quasi-public, institutions: that is they were corporations of persons either in their private capacity or as representatives of certain interests, either denominational or local. Save in a few states, and those near the middle of the century, the state obtained no supervisory control over them. In these few cases, as in Maryland and New York, there was an attempt to build up state systems, through state supplementary subsidies, that carried with it the right to inspect or to examine pupils, and to make certain specifications concerning tuition rates. In other cases the state limited its assistance to the provision of a building on condition that the locality would supply the teaching staff and support the school. The great majority of such schools, however, were purely private institutions, and the function of the state, even when it did interfere, was for the most part limited to the giving of assistance.

Thus the academy was an expression of individualism and of the new democracy; it was an expression of local effort; it responded to local needs, its activities and its object were determined by local ideas. Hence there was the greatest variety of conditions, with regard to support, with regard to subjects taught, with regard to standards of attainment, and with regard to extent of influence. Since the academy offered to teach almost any subject desired by a pupil—in this respect making a great divergence from the preceding type of secondary schools—and the established curricula prevented the widest variation in different localities, it gave fullest expression to individualism. Since the academy was very generally

supported by a tuition fee of substantial amount, it was supposed to be an expression of democracy in that it allowed each individual to determine his own educational opportunities and attainments. But it was soon made evident that while the academy prepared for a very much wider scope of social activity on the part of its graduates than did the old grammar school, and hence was not so much of an institution for the one or at most two learned professions, it was, on the other hand, quite as distinctly a class institution; for it tended, as did the private schools supplementary to the inefficient district schools and as did the provisions for pauper children in district schools, to draw sharp class lines and to restrict the better educational opportunities to the favored few.

The fact that the academies were the outgrowth of changed social conditions and were thoroughly expressive of the life and the ideas of the people of the time is indicated most clearly by the development in the curriculum.

Before the Revolution this new type of secondary school began to appear in response to new demands which the old Latin grammar schools did not, and could not, meet. The new social conditions brought about by the expanding commercial, industrial, and political conditions of the latter half of the eighteenth century made necessary a training for which the curriculum of the old grammar school was but ill suited. The chief business of the old grammar school had continued to be the preparation of boys for college; the chief business of the college was still preparation of men for the ministry, with shadowy beginnings of the later professions of law and medicine. But the curriculum of the college remained as it had been crystallized in its ecclesiastical medium of a century preceding. Down to 1800 the leading American colleges demanded of their entering freshmen, Latin, Greek, and a little arithmetic. In Harvard, geography was not added until 1807; English grammar, 1819; algebra, 1820; geometry, 1844; and ancient history, 1847.

A time was coming when people were to demand something beyond the classical crust for the education of their children; when boys were to be educated apart from collegiate predestination; when girls as well as boys were to share in the advantages of a broad education. Hence it is not surprising to find private institutions, later subsidized and chartered by the state, appearing, which emphasized the practical aspect of education by giving instruction in arith-

metic, accounting, writing, English grammar, literature, science, surveying, navigation, etc., in addition to Latin and Greek required for admission to college. Apart from the desire for better educational facilities the spread of the academy movement was an expression of a people to be freed, in the conduct of their educational institutions, from the narrow ecclesiastical and class control which had been growing up previous to the Revolution. A broader curriculum, secondary instruction for both boys and girls, apart from preparation for college, and secular private control then seem to be the characteristics emphasized by the academy education. Each of these elements may be said to have affected the qualification and preparation of the teachers in this class of institutions. It is, however, exceedingly difficult to generalize in this respect. Far more than the Latin grammar school did the academy type of secondary school vary from a fixed standard. There were academies of high grade and of low grade; those endowed with high public purpose and those dominated by a low commercial motive. Owing to their system of private control, the professional standards of the teachers were to be graded by the standards of the school.

If any generalization is to be permitted it may be said that in the *best* academies, the teachers secured their preparation, as did those of the best of the old Latin schools, in the colleges of the day. Even where the curriculum of the academy was broader than that of the college, there were men of unusual genius exhibiting that comprehensive intellectual grasp which enabled them to infuse light and enthusiasm into the new instruction. We find the following purposes expressed in the constitution of the first chartered academy in New England — Phillips Andover:

to lay the foundations of a public free SCHOOL or ACADEMY for the purpose of instructing youth, not only in English and Latin Grammar, Writing, Arithmetic, and those sciences wherein they are commonly taught; but more especially to learn them the GREAT END AND REAL BUSINESS OF LIVING. . . . It is again declared that the *first* and *principal* object of this institution is the promotion of true PIETY and VIRTUE; the *second*, instruction in the English, Latin and Greek Languages, together with Writing, Arithmetic, Music, and the Art of Speaking; the *third*, practical geometry, Logic and Geography; and the *fourth*, such matters of the liberal Arts and Sciences or Languages as opportunity and ability may hereafter admit, and as the TRUSTEES shall direct;²²

²² Brown, *op. cit.*, p. 195.

and who will gainsay that such an institution, with such a purpose, did not demand and secure teachers of the most liberal training of their time. We might almost say, judging from the work and character of this particular school, that the teachers were far above their training.

On the other hand, we can hardly gauge the professional standard of the academy teacher by such rare types as Adams and Taylor of Phillips Andover, or Dwight of Greenfield Hill. In very many of the academies of the lesser sort the teachers were educated but little above the limited requirements of their tasks. The most that can be said of these institutions is that there were no general requirements whatever; that each institution exercised its own choice in determining the qualifications possessed by the teacher; that these qualifications were more largely of a peculiarly personal nature and related more to strength and attractiveness of personality than in either the preceding or succeeding periods, since the influence of the teacher and of the school was exerted more largely through the personal character of the teacher than through his knowledge or through the nature of the subject taught.

One or two other facts of vital importance should be mentioned here. The attendance of pupils upon the old Latin grammar schools was always very small. These schools were one-teacher schools. Just before the Revolution the pressure for a more practical kind of instruction had led to the employment in many of them of an assistant to teach a meager quantity of writing, arithmetic, accounting. The core of the instruction was, however, the classics taught by the master. With the coming of the academies with their highly differentiated curricula we have the *beginnings* of the need of teachers capable of devoting themselves to specialized groups of subjects.

Two other relationships of a general character between the academies and the teaching profession are to be noted: first, in relation to the elementary schools, that a very important function of the academy was to give a broader preparation to the elementary-school teacher and to raise the standards of the teaching profession in this grade very materially; second, through the broader curriculum of the academy, the curriculum of the college was reacted upon and a much more liberal policy than had hitherto prevailed was here initiated. This response, to a considerable extent, was for the purpose of pro-

viding an appropriate preparation for secondary teachers, but it never reached any conscious formulation in definite requirements.

Further, the academy movement marks the beginning of secondary education for women, and the appearance of women in the field of secondary teaching. The academy may be said to have contained the germ from which two types of American schools have developed—the normal school and the women's college, both of which have been of no mean influence in the projection of higher standards for secondary teachers.

THE HIGH-SCHOOL PERIOD

During the second quarter of the century a new type of secondary schools appeared, which was to become a vigorous rival of the academy before the opening of the Civil War, which was to surpass the academy in importance by the close of the third quarter of the century, and which has now become, save in certain limited regions of the East and South, where traditions are strong and certain social conditions prevail that do not obtain in other portions of the country, practically our only secondary school. The transition from the academy was made in some regions by the higher schools conducted on the monitorial or Lancasterian system which, while they continued to charge a tuition, were supported by a public society and offered education at a merely nominal expense; in other regions by the free academies, which, as the name indicates, were but the old academies supported by sufficient endowment or local subsidy to abstain from all tuition requirements; and in a few of the larger cities, by the city colleges, or free grammar schools, which performed approximately the same function for the larger number of city youth.

The high school differs radically from the academy in two important respects: first, it is supported and controlled by the government, primarily by the municipal, though often assisted by the state, and hence is under a more centralized control and is far more amenable to public control; second, it charges no tuition, but offers a course of study, at first not as broad as that of the academy, but tending to become so, absolutely free to all classes in the community, and hence is absolutely democratic.

The high school is but the culmination of the free public-school system and is the outgrowth of the same economic and political conditions and the same social ideas. Though the high-school develop-

ment came somewhat later than the free-school movement, it is to be remembered in this connection that the schools were not generally made free until near the middle of the century, and that tuition rates were not abandoned in New York state until 1867. In this respect especially the high school is a fuller expression of democracy than was the academy; and while in some features it seems to be less an expression of the individualism of the people, in that it is under state supervision, in reality it is a much more complete expression of that individuality, for though always an expression of local opinion through corporate capacity, by that very fact it is more fully expressive and more readily responsive than could be an institution controlled by private persons or by trustees representing private, sectarian, or class interests. In this respect it deserves the term so frequently applied, "the college of the people."

Through its curriculum, now much broader than at first, it becomes expressive of the developing or changing interests of the people, especially those of an economic and commercial character. Through the plan of election of studies, it provides for the individuality of the pupil, and the personal interests of its patrons, even more fully than could the academy. Through the improved methods of study and of teaching, it keeps abreast of the developing scientific and technical knowledge, and of the art of teaching. It is only in regard to the one topic that the future papers of this series deal with, that of the standards of qualification of its teachers, that little advance has been made, until quite recently, and concerning which few generalizations can be made.

The English High School of Boston is regarded as the pioneer of the high-school movement in this country.¹⁴ In the general plan of its organization as adopted January 15, 1821, we find the following clause: "Eighthly, That it is required of all the Masters and Ushers as a necessary qualification that they shall have been regularly educated at some University."¹⁵

This provision in the regulations of our first public high school seems to embody the essential qualifications demanded of secondary-school teachers during the remainder of the century. While it cannot be gainsaid that many of our high schools of the present generation have not lived up to this standard, it must be admitted that this has been the ideal attempted by the secondary schools worthy of the

¹⁴ Brown, *op. cit.*, p. 297.

¹⁵ *Ibid.*, p. 300.

name. With the growth of state systems of education, especially since the Civil War, we have witnessed the extension of state control over the licensing of the teacher. The building up in each state of an elaborate plan of normal schools has been effective in maintaining and raising the professional standard of elementary-school teachers. In but few states, however, has the system of licensing secondary-school teachers gone beyond the requirements of the elementary school. Custom and nominal local requirements have not extended to the fixing of any higher professional standard for secondary-school teachers than that indicated by college graduation. This of itself implies a vastly broader training today than fifty years ago. Then again, the founding of our higher state institutions, especially in the central West, with departments of pedagogy has given an impetus to a special professional preparation of secondary-school teachers. The very heterogeneous condition of the present, with which the subsequent papers deal, and which makes it impossible to draw any general conclusion of any wide validity, is due to the two general lines through which the high schools have developed. In many states the high school developed simply as a part of the common-school system, without any special legislative authorization, but justifying itself against local sentiment, which in many cases looked upon all higher education as undemocratic and as a betrayal of the interests of the people, by judicial decision. In such cases when the high school only received recognition tardily, if at all, there could be, as a matter of course, no special qualifications for high-school teachers other than those required of common-school teachers. As a result then in such states qualifications are determined largely by the local boards, which may or may not demand an examination in subjects other than those taught in the elementary schools. This allows far greater discretion upon the part of local boards than is true in general of elementary teachers, and while one may say the general requirements are those of college graduation, it is too evident that such standards are in many instances purely nominal, though, on the other hand, in many large cities, the same local freedom permits the enforcement of yet higher standards.

In other states, high schools have developed as specific institutions of a secondary grade, fostered by grants from the commonwealth government. Such states may require in return only a test of work accomplished by the student ; but most generally have required that

the teachers of such schools shall conform to requirements established by the state superintendent or board of public instruction. In such states the requirement of qualifications equivalent to college graduation can and are usually required in actuality.

Some few of the western states, wherein this control over the secondary teacher has been made as complete as that over the elementary teacher, have taken an important step in advance, even of this; and believing that even the credentials of a college must bear examination, require that the secondary teacher in all state schools shall conform to requirements established by the state universities through their departments of pedagogy.

This has introduced another qualification, as important as it is novel; namely, that the teacher should evidence some knowledge of the science of teaching and give some evidence of skill in the art of teaching. But in the vast majority of states, even in those that have definite standards of qualification for secondary teachers, knowledge of the subject, which is the primary requirement, is also the sole requirement.

No problem of the many presented by secondary education is of greater importance than this of determining the nature of some general qualifications of the teacher and the definite establishment of these by law.

II

WHAT CONSTITUTES THE IDEAL SECONDARY TEACHER?

- REUBEN POST HALLECK, Principal Boys' High School, Louisville, Ky.
J. STANLEY BROWN, Superintendent Township High School, Joliet, Ill.
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Questions and theses arising from this division of the study:

1. Is it important that the number of high-school teachers should be about equally proportioned between the sexes? If so how can this be done?
 2. There is serious need of a more effective selective process by which a larger proportion of teachers of choice personality and adequate scholarship will be secured for public high schools.
 3. With the best that schools can do, the larger and more vital preparation of the teacher comes after experience begins: therefore, for practical reasons alone, it is the duty of superintendents and school boards to insure opportunity for progressive improvement on the part of their teachers.
 4. It seems to be the unanimous opinion that a high-school teacher should be primarily devoted to the welfare of his pupils rather than to the claims of a subject. How can this attitude and interest be insured in case of an intense specialist in one of the academic branches?
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REUBEN POST HALLECK
Principal Boys' High School, Louisville, Ky.

The personality of the secondary teacher.—I am here leaving to others the scholarship requirements of the secondary teacher. For years it has been my habit to study the personality of secondary teachers and to recommend them largely in terms of their personality.

Sympathy.—First, it is unusually necessary for secondary teachers to have a sympathetic personality. Adolescence craves sympathy more than any preceding age. The teacher must feel with the pupil, must comprehend the pupil by an intuitive lightning flash of sympathy, which ought to light up every dark schoolroom. With

intelligent sympathy a teacher can do anything in reason with adolescents. Without sympathy he may develop such a spirit of contrariness in them that they will walk to the block and lay down their intellectual heads before they will study for him. Witness the number of those who leave school because they begin the downward path by failure in some one subject in which no sympathetic effort is made to reach them.

Imagination.—In the second place, an ideal secondary teacher must have a broad and vivid imagination. It ought to be understood by every teacher as a psychological truism that sympathy cannot be wide or deep or penetrative without imagination. Since the experience of two people cannot be exactly the same, they can cross the stream which separates them only by the bridge which imagination furnishes. The teacher is striking in the dark if he cannot frequently look at the world through the eyes of the adolescent. The adolescent is of imagination all compact. Things prosaic to us suggest to him an unexplored new world of enchantment. In the Elizabethan age the imagination was considered more necessary than the reason to interpret the facts of life. A later time was to usher in the cold juiceless age of reason and then there was decadence. The ideal teacher of adolescents must be an Elizabethan. His world must be at least occasionally illumined with the light that never was on land or sea.

Humor.—In the third place, an ideal secondary teacher must have a sense of humor. This will deter him from over-stressing certain things and from over-emphasis in general. A sense of humor will keep a teacher from becoming shrill. A teacher should develop the Shakespearean capacity for being easily bored. Adolescents have this capacity in a remarkable degree. Their teacher should not let them outclass him in this respect. Experiments have proved that excessive repetition of the same presentation tends to develop a comatose or a hypnotic condition.

Moral character.—In the fourth place, the teacher should have character. By this I mean simply the disposition to do his duty one hundred times out of one hundred without exception. I am content to take a teacher of this type, even if he is imperfectly developed along some intellectual line. I know that the character will force sufficient intellectual development. I am never sure that mere intellect will develop character.

Youthfulness.—In the fifth place, youth is a fine quality for the teacher of adolescents. The majority of such teachers probably begin to decline from their zenith after thirty-five. The world of the adolescent tends to grow remote and the sympathies to be narrowed after that age. I have for some time noticed that parents who wish certain teachers to make an appeal to their sons frequently select one of the younger body of instructors who has had some athletic experiences in common with the boy. In everything except administration, it is probable that in the majority of cases a teacher at thirty-five is a better adolescent teacher than the same teacher at forty-five. Shakespeare remained an adolescent until death, but the majority are not in his class. Enthusiasm and tireless energy are qualities absolutely necessary for the teacher of adolescents, and these are precisely the qualities most likely to diminish with age.

J. STANLEY BROWN

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Personal quality and social efficiency.—The ideal teacher must possess a great soul. The mundane setting of every great soul is physical, and so it comes that the fundamental quality of a teacher's personality must be physical. Good birth, careful training in childhood and youth, good health, good habits, a well-balanced mind, an optimistic nature, well-regulated appetites are some of the possessions of a teacher with the most effective personality. It is not essential that the ideal teacher should exemplify either extreme in avoirdupois, but it is accepted without argument that personal magnetism, culture and attractiveness of character are observed, admired and understood without verbal expression. Simple, unaffected neatness in the appearance and dress of the teacher can, in my judgment, be relied upon to produce the most lasting effect on both fellow-teachers and students.

This teacher must have an intense sympathy with adolescents, and a permanent and emphatic interest in them. No one can teach a high-school boy to the best advantage, who does not have an abiding consciousness of that boy, his needs, his traits, his environments and all other things touching his life. The way of approach to the teacher ought to be made easy by him in leading the youth, step by step, to see that his highest interests are subserved. The door to such an

approach ought always to be ajar, and the way should grow more and more familiar by use. By this means can the indispensable personal relations between the ideal teacher and the student be preserved.

The ideal teacher must be democratic in spirit and dignified in bearing, in order that his life, his teaching, and his magisterial product may promote the highest welfare of the government of which he forms a part. Upon this teacher, in largest measure, rests the responsibility of keeping forever the spirit of democracy, because from almost all other institutions democracy has come and gone, or has come and is going. If governments by the people are to be preserved, schools for the whole people must be encouraged, enlarged, dignified, and kept democratic. In preserving all these things so dear, the personality of the teacher is the paramount factor.

The ideal teacher must take an active interest in all civic and ecclesiastical questions tending to mold or crystallize community sentiment. The influence of the teacher ought to overshadow the community in which he lives, and ought to be a guiding power in directing scholastic and municipal life. Whatever makes for civic, ecclesiastical or municipal improvement may properly demand a share of the teacher's attention.

Scholarship.—The second quality of the ideal teacher concerns scholarship. It will be accepted without argument that no one whose scholarship is limited to graduation from the kind of school in which he teaches can do justice either to himself or his classes. The scholastic attainment of our ideal teacher must then represent more preparation than can be secured in the secondary school. After the high-school course has been completed he ought to go for two years to the best state normal school or school of education available, and follow this immediately by sufficient work to secure the bachelor's degree at one of the best colleges. If the work ahead of him as a teacher demands greater specialization than he has been able to get up to this time, he may spend two or three summers in the university and take his master's degree in the line of work in which he has found his greatest strength and interest.

Now comes the critical period, demanding that his knowledge be matured, rectified, and proved by the real work of teaching. The thought-plane of the teacher ought always to be the same as that of the student. With the ideally prepared teacher this will always be found. When preparation for this kind of teaching has gone beyond

that mentioned, the thought-plane is elevated, so that the boy is not recognized but only the man. Work in original research, and that leading to the Ph.D. degree are very likely to make the teacher become absorbed more in his work than in the student to whom this work may be presented.

Whenever any teacher's scholarship reaches such a point that he is more interested in his field of work than he is in high-school boys and girls, he ought no longer to teach boys and girls, but men and women; and hence his sphere of labor should be transferred to the college or university. This is the line of demarkation between teaching boys and teaching a subject. In this may also be seen the difference between the vital, inspirational, sympathetic teacher in some secondary schools, and the dead, uninteresting, heartless teacher acting simply as a condenser and distributor of knowledge for some college or university.

I do not mean that the thought-plane ought not to be subject to daily change, but when the condition would be improved "the fodder ought to be placed lower in the trough."

Special professional preparation.—The period of adolescence covers practically the period of secondary education. The adolescent is unlike either the child or the man; and hence the ideal teacher, having to deal with an individual differing from others, must have a different kind of professional knowledge and training. Public toleration of poor teaching is less for the secondary than for any other school, because the public mind does not grasp the greater difficulties presented in this school. The service is difficult; let the teacher have all the knowledge obtainable from schools of education and normal schools, because the erratic boy or girl may prove the exception to all previous cases studied and all deductions made.

G. Stanley Hall's *Adolescence* ought to be the bible of all looking forward to secondary teaching, and to most who are teaching in secondary schools. This treatment of the adolescent may yet show us the Moses and the Promised Land.

It is absolutely essential to the ideal that this teacher be a close student of adolescence. The primary teacher may attain great success in her field of work without the knowledge coming from this kind of professional study, and so also the college and university teacher whose interest is expected to be limited largely to subject-matter. He regards his work entirely finished when he has presented

the truths of the subject in proper order and very generally cares little whether his students obtain great things from him. He defends his position by saying that he is teaching men and women who know why they come, and it is not his business if they fail in grasping all he presents; but the man who teaches adolescents must know boys and girls from thirteen to eighteen years of age.

In addition to reading the best thoughts of the great teachers, the ideal teacher must be a daily student of youth. By this means years of experience and struggles with large and ever-changing bodies of students will lead him to know almost intuitively what is best to do with and for each student.

Progressive improvement.—It is peculiarly true of the secondary teacher that no amount of professional reading and study can ever take the place of extended experience involving close contact with secondary school students. The walls of partition have to be broken down and access to the teacher, not only made possible, but invited and urged.

A senior in a great normal school or college of education can tell you precisely what to do with a boy under any and all conditions; but real contact with a boy in a real school soon shows such a senior that a boy has much to do with what is accomplished in him, and so the ideal teacher can neither depend on theory nor on practice, but upon a judicious and harmonious molding of both.

Accordingly no ideal teacher can remain so who does not spend at least every fifth year, or one-fifth of each year in mastering the best and newest theories presented by the best colleges of education and normal schools.

STRATTON D. BROOKS

Supervisor of Schools, Boston, Mass.

The ideal secondary-school teacher should possess at least the characteristics included in the following groups:

Personality.—Tact, interest, and sympathy was the trilogy with which Professor Münsterberg put to rout the advocates of psychological training as the fundamental element of success in teaching. These three characteristics are, and ever will be, the fundamental ones of every successful teacher. They are the qualities which enable mediocre intellect to render acceptable service. It is because of them that teachers of limited training rise to conspicuous heights. Every

school, however poor the preparation it offers, however inefficient the training which it gives, yet sends forth some men or women whose personal qualities make them real teachers. It is their success that the school offers as evidence of its own superiority, or as conclusive proof that extended professional training is unnecessary; though, in truth, the success of the poorly trained is most often due to the presence, and the failure of the well-trained, to the absence of the three essential characteristics, tact, interest, and sympathy.

In addition to tact, interest, and sympathy there are other elements making up the personality, many of which have such a bearing upon success that we wish our ideal teacher to possess them. A pleasing personal appearance, a keen eye, a well-modulated voice, and good health are much to be desired. Honesty, truthfulness, fair-mindedness, absolute uprightness of character so ingrained as to make itself manifest in manner of living rather than in words—these must be demanded of all who aspire to any leadership of boys and girls, or who hope to be concerned with any education really worth while.

An understanding of youth.—The ideal teacher must know his pupils, and know them so thoroughly that he can deal with them with tact, interest, and sympathy. I do not mean that knowledge which many fluent speakers on child-study possess, that knowledge which says that a child at ten has such and such characteristics, while a child of fourteen is so and so. I mean rather that knowledge of boys and girls which, taking all the aid it can from the generalizations of paidology and every other "ology," deals directly with each boy and girl, or with the assembled boys and girls, with such accurate interpretation of their thoughts and feelings that every appeal, whether to emotion or to reason, is adapted to the case in hand.

By thus emphasizing individualization of appreciation of the mental attitudes of children I do not mean to reject the generalizations of child-study. In fact the general similarity of children of the same age is so markedly different from that of children of another age, that teachers who have for years devoted themselves to the appreciation of the mental attitudes of children of one age find great difficulty in adjusting themselves to the different conditions presented if they are asked to teach children much older or much younger. Thus the high-school teacher has a habit of interpretation of mental attitudes which will fail him in the grades, while the teacher of long experience in the

grades will in a similar way misinterpret the high-school pupils. This ability to appreciate the mental attitudes of children of high-school age is the *sine qua non* of the ideal teacher of secondary-school children, and must cover both the emotional and the intellectual sides of child life. A superintendent may visit room after room. What he says and does may please and instruct. He may bring with him an air of good-will and jollity to which the school will respond and on account of which every child will like him. Yet all this may not affect in a lasting way a single child. With the teacher it is different. He cannot come and go. It is his to share all the varying moods of all his different children. Through their love and interest and pleasure and ambition he moves them toward sound characters, but none the less through their hate and anger and displeasure and doubt must he accomplish the same end. In intellectual matters must he also be quick of perception, and appreciation. He will allow the students time enough but not too much, the currents of thought must not acquire the weedy stagnation of the inclosed pond, nor yet the futile shallowness of the bubbling brook. He must recognize the full flow of the mental current and change from topic to topic or lesson to lesson at such a time and in such a way as to carry over from one to the other the greatest amount of force and strength. He must perceive the flow and the ebb of attention and power and set the hardest tasks when they have greatest chance of successful accomplishment. He must read with ease the subtle signs which indicate the approach of fatigue. He must be aware that the vigor of attack depends upon the kind of fatigue which precedes and cunningly devise the presentation of each subject so that it gains most or loses least from its relation to the preceding.

The characteristics which have been included in the three preceding groups are essential and fundamental but they are by no means the sole characteristics of an ideal teacher. They have been placed first because more largely than those which follow they are the result of birth rather than training. Alone they are of small value, but through them and because of them the teacher may most effectively use the additional educational weapons with which he may be equipped. The professional school may do much to bring out and to strengthen them, but even their complete development in the school of experience is not uncommon, a condition which seldom exists with reference to the remaining groups.

Scholarship.—The ideal teacher must know his subject accurately and thoroughly lest he be justly compared with the teacher to whom a master of the Latin school said, "You are an excellent teacher of things that are not so." The appeal for ample scholarship has been so often made that its repetition is unnecessary. I wish rather to point out that in itself alone it may be a hindrance rather than a help. It is only when high scholarship is possessed by a man who knows children that it reaches its highest. The teacher fresh from college knows his subject, but he does not yet know how much of his subject is adapted to high-school pupils. Of such a teacher it has been said with some show of truth that his "efficiency decreases in proportion to the square of the distance he has gone into his subject." The most brilliant scholars have greatest difficulty in their first years of teaching in coming down to a high-school class, and for this reason experienced principals prefer those of lower rank in scholarship.

In his knowledge of the subject the teacher should include, therefore, both the final goal toward which he is leading the pupils and the present position of the pupils on the journey. The highly educated teacher may know only the former; the teacher of limited education may know only the latter. The arithmetic teacher who knows only that the class are "going to page 126" as set down in the course of study, and the teacher whose vision ranges so far ahead into algebra and higher mathematics that he does not know that his efforts to "open vistas" of distant mathematical fields are hindrances to real progress, are both alike far from the ideal. It is clear, however, that the possibility of the ideal exists only with the one possessing the more extended education.

The spirit of research.—The ideal teacher must possess the spirit of research. No man can set boundaries to mark the amount of knowledge desirable in any subject. So long as the teacher remembers the capacity of his pupils there are no limits beyond which he should not go. The ideal condition is not determined so much by the distance that a man has gone into his subject as by his attitude toward it. The desirable, or better, the essential attitude is that of research, that determination to know the truth within a certain field and, if possible, to extend the boundaries of that field. The teacher fresh from college may know his subject but if he lacks the spirit of investigation he will not keep in touch with the changing character of that subject and will degenerate into a mere time-server. In ten

years the teaching of Latin has been greatly improved, but there are many teachers, once excellent, who are unaware of the changes which have taken place. Only those teachers who are filled with the spirit of research can keep themselves among the foremost of their time.

Selective judgment depending upon special professional studies.—

The attitude of research demands that the teacher be able to judge and to choose. Not everything that appears in regard to any subject is the truth, and not all of the things which are true are usable in our teaching. The teacher must sort the true from the false and decide how the truth will modify his teaching. This judgment demands a critical attitude which can come only from thorough training. A philosophical training of such breadth and depth as to enable the man to judge sanely and soundly is essential. Since this judgment is concerned with determining the educational value and educational results of material presented in his special field it is well that this philosophical training include the sciences most closely related to education such as psychology, ethics, and sociology. Furthermore no judgment of the value of educational material, will be of value if it be not made by one who has some standard of educational worth which is in accord with the general educational situation of the times. A training in educational theory and principles thus becomes part and parcel of the ideal teacher's professional equipment.

The critical attitude applies not only to material but to method. The ideal teacher is not so much in need of a method of teaching as he is of a knowledge of different methods sufficiently wide to enable him to judge safely as to the desirability of adopting any new method or device which may be proposed. The teacher who comes out of school or college equipped with a method which works is less liable to become the ideal teacher than the one who has been made conversant with the major purposes and some of the minor devices of many methods to the end that he may have a discriminating attitude toward methods and be able to select those which lead to the ends which his own educational philosophy has established as the purpose of education.

Such an appreciation of educational aims and educational methods can come only in connection with some study of the history of education. A knowledge of what the world has done will not only aid in the comprehension of what it is attempting to do, but it will also prevent the expenditure of effort along lines that have proved

unavailing. The scholar possessed with the spirit of research toward both material and method will of necessity be an experimenter. It is essential that he know what has been tried both that he may judge of the value of methods proposed by others and that he may avoid directing his own experiments into channels which have long since been shown to lead to undesirable results. Our ideal teacher must therefore in his practice make extended use of his knowledge of the history of education.

Progressive improvement.—The ideal teacher must be able to read with discrimination and judgment. The professional school may give some foundation for the attainment of the ideals set forth, but it can do little more. The teacher must maintain himself, and the hundreds of teachers whose worth has not improved in the last decade are witnesses to the fact that this is far from easy. In order to maintain himself he must read. It is by reading that he shall keep before him the fundamental elements of his training and render them effective in his work; but, on the other hand, it is the character of his fundamental training which determines whether his reading shall help or hinder. Only the scholar can read the periodical literature of his special subject and sort the true from the false. Only the well-trained man can read the educational journals with his mind open to conviction and yet avoid following strange gods. Only the man with extended professional training can determine the validity of the psychological, ethical, or sociological presuppositions which underlie some new method which on the face of it seems desirable. It is perhaps fortunate that the under-trained teacher is little prone to investigation and progress, or we should have greater damage than we do now from ingenious and plausible presentations of educational foibles which a sound theory of education must reject.

Summary.—Such is my conception of the characteristics of an ideal secondary-school teacher, and it is evident that professional training will do much toward attaining to that ideal. Tact, interest, and sympathy it cannot give, but it can furnish such soil and surroundings that the seed already sown may come to an abundant fruitage. To him who has tact, interest, and sympathy it may reveal the child. It may promote scholarship or accept it from the non-professional college; but in either case it may give to the spirit of critical research that turn which directs it toward educational results. By implanting educational ideals it renders possible a saner judgment of educational

values, which in turn assists in the selection and evaluation of methods. From the history of the past and the literature of the present it seeks to retain the value of experimentation while avoiding waste of time and energy in the repetition of experiments.

DR. A. F. NIGHTINGALE

Formerly Superintendent of High Schools, Chicago, Ill.

In our earliest childhood we learned from the lips of wisdom that the largest success in life, whatever our calling, profession, or business would come only as we had the highest ideals. A high ideal, however, is of little value, and will change neither "spots nor color" unless our aim be fixed constantly toward that ideal. The motive, the moral attitude, is the most essential thought in one's life.

The question of sex.—Before discussing the essential qualifications of the ideal secondary teacher, let us touch upon that division of the subject which is attracting much attention, provoking much discussion, and bringing into view a startling array of statistics, viz., the ratio of women to men in the public schools of the United States.

While this question has special relation to the common schools, it is a factor which cannot be eliminated in the solution of the high-school problem, and enters with irritating effect into our reflections as to the quantity and quality of those credentials, physical, intellectual, and moral, which the welfare of our secondary schools demand of every teacher.

His Reverence, the eminent Bishop Spalding, of Peoria, some time since said, "Women are employed almost exclusively in our public schools, because their services are cheap;" and added that the same motive would justify us in employing convicts as a still more frugal method of employing teachers. Without commenting on the worth or the wisdom of the statement especially regarding "convicts," is not the bishop correct, when we get down to the final analysis of the motive which prompts the employment of such an abnormal ratio of women in our schools?

It is a maxim in all other kinds of business that the best is the cheapest, but in securing teachers, boards of education seek to be justified in reversing this truth, and making the cheapest the best. Go where you will you hear it said, "We need more men, but we cannot offer the salaries they demand." This is a true statement, and as sad, as degenerating, and as degrading as it is true, and therefore

ought not the sex, which represents the pathos, the purity, the piety of this world, through whose nurturing influence the flowers of hope are made to bloom perennial in the garden of the heart, whose solace is a surcease of sorrow, and whose soul, instinct with the love of maternity, goes out toward childhood, to mold it through sympathy as does no other influence save the directly divine—ought not, I say, the sex to combine in their majestic potency to make this statement a libel rather than a truth?

In Massachusetts, from quite recent statistics, of all its public-school teachers 90.5 per cent. are women and only 9.5 per cent. are men. In Illinois 71.3 per cent. are women and 28.7 per cent. are men.

The ratio of men is constantly diminishing.—I am one of those who believe that the same work performed with the same skill, and producing the same beneficent results should receive the same pay. I also believe that at present there are more men than women thoroughly well qualified to teach in our secondary schools, and that therefore the large ratio of women to men in these schools militates greatly against the quality of the work they ought to turn out, as the crown of our public-school education and as fitting-schools for colleges.

I would not be misunderstood. I believe in the higher, the highest education of woman. I am in hearty accord with her purpose and ambition to enter all the professions, all the trades, all the departments of industry. She is entitled to the right of way along every avenue where moral character is to be molded, intellect developed, or support secured. I only insist, and I believe my position is sustained by the logic of nature, and by the necessities of the age, that a parity of number shall be maintained in our high schools, that where education, experience and ability are alike, there shall be as many men as women employed, and that there shall be no discrimination of salary based upon sex.

Moral character.—Since the age of pupils in our secondary schools is such, that these pupils respond to influence virtuous or vicious more readily than in any other period of their lives, and since the end of all school education is character, the first essential of an ideal secondary-school teacher is moral character. Without this, and of a very pure and exalted kind, no one can be an ideal teacher, however rich may be the scholarship, rare the knowledge of the child or ripe the experience.

Scholarship and academic culture.—It is a trite saying that edu-

cation is a primal qualification for those who would mold the pliant mind of childhood, and shape it into a character that shall bless the world by its influence, but education is a term which in our time is too loosely defined.

I have great respect for specialists who fill the measure of their days in investigation and research, seeking after and delving into hidden things in the universe of God's thought, in the realm of nature. I honor the philosopher who spent his life upon the Greek article, and in dying sighed that he had not given his years to the dative case; but I would not employ him as a teacher of elementary Greek in our secondary schools. We look to the laboratory and the cloister for those revelations which revolutionize scientific thought, and present to us the origin and development of psychical entities; we bow in silent awe before those who discourse with such eloquent and unlimited verbiage about child-study and the concentration, correlation, and co-ordination of the various branches of learning; but the student who gives his life to the laboratory, and the teacher who stands before the living child are two different individuals. The physicist and chemist who teach our youth should sit not only at the feet of Helmholtz and Leibnitz, of Faraday and Thompson, but at the feet of Homer and Dante and Shakespeare as well. The classicist who unfolds the beauties of Cicero and Homer should also be well tutored in mathematics and science. Our colleges differentiate too early. Candidates for positions in our secondary schools should not commence a university course at their entrance to college.

I desire to make a plea for broad culture, symmetrical training, an all-around education in language, mathematics, science, and history; and for a persistent and never-ceasing study of English classics and English literature. For, as President Eliot says, "The power to rightly understand, to critically use the mother-tongue, is the consummate flower of all education." I believe in departmental work in our secondary schools as in our colleges, but the spire should be built on the top of a finished building, resting on solid foundations. One, then, who gives all his college life to a single subject, pursuing besides only those studies which are intimately collateral, may be giving full rein to a marvelous genius, and preparing himself to become a benefactor in the discovery of some secrets in the physical or psychical world, which shall ameliorate the condition of humanity and hasten the millennium; but such a person deserves no place as a

teacher of youth in our secondary schools. The education of a teacher should be first general, then special. I have seen it written,

All art seeks the highest form of expression for what it creates. The cathedral is the highest expression of art in architecture; the oratorio and symphony in music; poetry in literature, and eloquence in oratory. As the human soul is God's expression of what is greatest in man, so that is the greatest of the fine arts which shall express the most of man's greatness. Knowledge in all its forms, is the marble in the quarry, or dragged up on sledges a little away from the primeval mud. Literature is the subsequent statue, full of grace and snow-white in purity. Language then as the gateway to the soul's highest expression is the center about which all studies correlate.

I would make language then, ancient, modern, foreign, native, the basic study for all who would become successful teachers. Upon these foundations laid deep and strong, I would build a super-structure, scientific in character, mathematical in correctness, historical in breadth; and upon this building poetical in its symmetry, beautiful in its proportions, richly plain and plainly perfect in all its inner furnishings, there should rise some magnificent turret, original in design and typical of a special genius, which should tell to all around its exact location and for what it is specifically adapted.

The very minimum of preparation in scholarship should be a college education; an education general in character, removed at least four years from high-school training; and where circumstances may permit I would add one year of resident graduate work along specific lines, and two years of study and travel abroad.

Progressive scholarship and social activity.—This education, however, to the real student, to the scholarly scholar, will be but a beginning of those intellectual possessions which shall be easily and delightfully acquired as the years unfold; but one who, having secured the meager discipline of a high school, attempts to acquire the knowledge and power sufficient for a secondary teacher, through university extension circles, Chautauqua courses, summer schools, normal schools, and private study, will ignominiously fail to secure that kind of scholarship which the needs of our secondary schools demand.

The real teacher will always be a student. He will not spend his years in riotous living, his evenings in social pleasures, nor his leisure in flattering his own conceit by writing books for an already congested market. He will be furnished with an ever-increasing library

of his own, he will be a patron of the public library if one is at hand ; he will be a social power in the community where he lives, the inspirational center of every literary circle, and more than a Delphian oracle to all the young people around him.

But "pity 'tis, 'tis true," intellectual attainment, education, is only one of the essential elements of a teacher's equipment. You may call it the headstone of the corner if you please, but the headstone of the corner is only a small part of a great structure.

Temperament and personal qualities.—Much, I shrink from thinking how much, depends upon the temperament of the teacher. Many a school has been ruined, many a pupil's life has been spoiled, and the current of his activities turned into wrong channels, by some teacher, whose words, sharper than a serpent's tooth have produced irremediable wounds. A dyspeptic, the victim of a disordered stomach, who enters the schoolroom under the influence of "an undigested bit of beef, a blot of mustard, a crumb of cheese, a fragment of an underdone potato," is a maniac, and a patient public should insist upon his retirement. A cross, peevish, nervous, sarcastic, wizened, torpid-livered man or woman has no business with the profession of teaching. To be a teacher, a guide, a trainer, a safe counselor of youth, one must be a paragon of kindness, patience, and love ; not a kindness that encourages disorder, not a patience that brooks an insult, not a love that borders on maudlin sentimentality ; but a kindness, patience, love that are divinely given, divinely developed ; these virtues, these graces, should be so enthroned in the mirror of the soul, so interwoven into one's intellectual attainments, that a company of youth sitting day by day under the benignant influence of such a character, would be molded into such a oneness of industry, ambition, and appreciation, that the memory of that teacher would forever be the Mecca of their deepest gratitude. While a pupil bright, industrious, keen in perception, quick in adaptation, appreciative, thoughtful, excites our admiration and tempts our best attention, it is rather the dull pupil, whose hereditary possessions are few, but whose application is diligent, who has never yet felt the touch of a master hand upon his sleeping talent, and the mischievous pupil, who is in a constant state of natural ebullition and whose intellectual fermentations find vent at most inopportune times, that call forth our highest talents, and test our real ability. These are the pupils that try our patience, and exhaust our kindness ; and yet these are the

pupils whose welfare demands the richest products of a most serene temper and who will not brook either acrid words or an attitude of indifference, and the teacher will become the true teacher only as he secures the respect, wins the confidence and gains the absolute affection of the dull, the indolent, and the mischievous; and these will come only as a result of an exhibition of patience and kindness which is second only to scholarship in a teacher's equipment.

The silent influences of nature are stupendous in their results. We see them in the blade of grass, the unfolding leaf, the bursting blossom. They are everywhere present, night and day, noiseless yet maturing, producing all that is beautiful, and sad to say, all that is baneful. In the very breeze that fans us as we walk the streets may lurk the bacteria of disease as well as of health. It is equally true and equally demonstrable, and without the aid of a microscope, that every person carries with him an atmosphere of good or evil; and far more eloquent and infinitely more impressive than all his precepts and all his professions, is the silent influence of his daily example.

Power of example.—Personal appearance then bears no insignificant relation to a well-appointed teacher. I do not refer to beauty of face, for sometimes upon the homliest features there sits those qualities of soul that transfigures the person until "his face shall shine as the sun and his raiment be as white as the light." I refer to that personal appearance that manifests itself in tidiness of person, in neatness of dress, in grace of posture, in correctness of gait, in civility of manner, and in all those graces and amenities, whose silent influence will metamorphose character, and establish right habits in those who are to us as clay in the hands of the potter; but a teacher, I care not if his scholarship approaches perfection, who is careless of his personal appearance, slovenly in his dress, awkward in his gait, boorish in his manners, whose taste for the graceful and the beautiful has not been developed, and who forgets that the way he sits and stands and walks, the way he dresses and addresses, is having a silent and incalculable influence upon the character, life and destiny of all his pupils, is not fit to be in the schoolroom. It is no place for cranks and dudes, for people of eccentricities and idiosyncrasies who take more pride in being unique and peculiar than in being civil and gracious. When one's instruction is such as to inspire confidence, then his every attitude will provoke imitation, so that the better the instructor, the more important is it that his per-

sonal appearance, his manners, his dress, his conversation, his every movement shall reflect the Christian gentleman.

Voice and oral expression.—Let me speak of but one more essential characteristic of the real teacher—a gentle, well-trained, cultivated, mellow, musical voice—a voice so attuned to pleasing harmony as to attract the listless, stir the ambitious, inspire the thoughtful. A harsh, rasping, shrieking voice, the mouthing of one's words, carelessness and lawlessness of utterance are faults so glaring that their toleration is a constant surprise. There is no sense so acute as that of hearing, and it is through the ear rather than the eye that pupils learn the form and use of words. Poor spelling, the absurd application of technical terms, and the strange answers to questions set for an examination are often more the fault of the teacher than the pupil.

A distinct articulation, a clear enunciation, a proper pronunciation, the taking off of one's hat in respectful courtesy to every English word and to every syllable of that word is an all-important culture to one who would be an exemplar of the English language before his pupils. The reading of the English classics in our high schools is something abominable.

In our intense anxiety to teach literature we have abandoned all attention to voice culture, and while I would not sacrifice thought to utterance, they are to my mind inseparable when one is reading aloud. I am not arguing for elocution in its vicious sense, nor for Delsarte in its excessive forms, but I do contend that we shall not be able to cultivate a literary sense in our pupils, unless we are able to read literature with a full application of its emotional feeling, and awaken in our pupils such an appreciation of the style as well as the content, that they will be aroused to cultivate the ability to differentiate between the pathetic and the humorous, the didactic and the descriptive, in vocal expression as well as in thought comprehension, and not read the "One Hoss Shay," the "Sermon on the Mount," "The Death of Paul Dombey," and "Rienzi to the Romans," all in the same tone, with no stirring of the passions and no change of the features. This is all out of nature. The young woman standing at the bedside of a dying mother, the young man, with all his nerves at full tension contending on the football ground, will each show in the play of every feature, emotions befitting the occasion, and it is quite unpardonable that in our high schools where there should be the

freest exercise of the organs of the voice to insure not only good tone, but a healthy development of other physical functions, the natural should be so subordinated to the artificial, that we are forced sometimes to say that pupils seem to make progress in spite of their teachers.

Summary and conclusion.—In this honest but homely way I have presented some of the qualifications which I deem essential for those who would enter the profession of secondary teaching. Is the picture overdrawn? Are the conditions exaggerated? Do I exalt too highly the teacher as an exemplar of physical health, mental acumen, moral power? Can one who is to guide, direct, control the mental trend, fashion the moral habits and shape the destiny of the youth of this generation be too erudite? If, as Emerson says, "the true test of civilization is not the census, nor the size of cities, nor the crops, but the kind of man the country turns out," then as men and women largely responsible for this civilization, we cannot have our voices too thoroughly trained, we cannot be too careful of our personal appearance, we cannot have our morals and manners, and our relations to society, too nicely defined, we cannot cultivate too even a temper in all our methods of discipline, we cannot enter the profession with a scholarship too rich, ripe and rare, nor improve upon it in our experience with too much reading, reflection, and study.

When there shall be a parity of salaries among men and women, when they shall have all their powers fully and ornately developed, when moral character as well as mental equipment shall dominate in the choice of teachers, then will our secondary schools excel all other agencies, in advancing and perfecting the civilization of the twentieth century.

J. F. BROWN

Inspector of High Schools, State University of Iowa, Iowa City, Iowa

This paper will be limited to a very brief statement of the qualifications which the writer conceives to belong to the ideal secondary teacher. No attempt will be made to discuss these qualifications at length.

Personally.—The ideal secondary teacher should have good health and sufficient strength to endure without serious fatigue the drafts made upon his vitality by the teaching and by the nerve-strain incident to the control and direction of impulsive, buoyant youth.

Poor health and lack of endurance on the part of the teacher are responsible for many misunderstandings and consequent lack of hearty co-operation between teacher and pupil. He should be able to command the respect and confidence of pupils. If to this faculty there can be added a personal agreeableness that wins well-sustained popularity, so much the better. He should possess a certain sprightliness of spirit which renders him at all times a match for the more or less spasmodic spirits of his pupils. He should be able to understand and enjoy the innocent enthusiasms of youth. He should have a healthy sense of humor, a great power to enliven the monotonous routine of daily work, and to take the sting out of an unpleasant situation. The ability to see and enjoy the humorous and to relieve the tension of a seriously uncomfortable position by a well-timed humorous remark is of special value in the management of boys.

He should possess self-control, not cold stolidity or unbending dignity, but a never-failing command of himself and his resources, showing itself in position, movement, and word, and perhaps most of all in the voice, that wonderful power for good or ill in all social intercourse. This self-control usually manifests itself in a certain repose, not pose, of manner which is a great power in determining the atmosphere of the school. He should have a strong interest in human nature, especially in the ultra-serious moods and the tempestuous impulses of youth. This interest breeds appreciation and sympathy. He should be able to understand and to let his young friends know that he understands, even though he may disapprove and chide. He should believe in boys and girls and have faith in the greatness of the work in which he is engaged. His deepest convictions, his ideals, and his habits should make for good citizenship and high character. He should be a man, she should be a woman, in the best sense of the terms.

Scholarship.—The ideal secondary teacher should possess a scholarship broad enough to give him a fair appreciation of the world's work and of the whole field of human culture. He should understand and appreciate the work of men and women outside his own field of labor, and he should be able to mingle with them in social and business relations without showing too plainly the earmarks of his own vocation. He should know enough to know there are many fields of human knowledge and effort just as important as his own even though they may not be so interesting for him.

His knowledge of his own particular subject should be thorough enough to enable him to spend his energy in studying the needs of his pupils and in devising the best methods of presenting his subject, rather than in the mastery of the facts with which the subject has to do. He should be able, on occasion, to entertain, instruct and inspire his pupils by lecturing to them—a much easier task than that of securing good oral or written work from them. He should have sufficient scholarly interest in his subject to incite him to constant advancement in it. He may even contribute something to the sum total of human knowledge in his chosen field. A very important though necessarily somewhat limited sphere for his activities may be found in the writing of textbooks. Good secondary teachers must necessarily study methods of presenting their subjects, hence the excellence of many textbooks prepared by them. The teacher's knowledge of subjects closely allied to his own should be sufficient to enable him to bring out clearly the relationship existing between them. He will probably be more efficient if he can teach two or three subjects equally well.

The extent of his scholarship measured in terms of school degrees cannot be dogmatically stated. There are many exceptions to any definite rule. The writer's observation leads him to believe that the bachelor's degree from some good college or university is none too much as a minimum. In many cases it is clearly insufficient, for example, when the course pursued has included a little of many subjects but not enough of any one to give an adequate knowledge of it. If to a well-selected college course there can be added a year or two of graduate study along special lines, the equipment is so much the better. But when this advanced work is done, the teacher sometimes needs to be reminded that his duty is not primarily to make scholarly specialists of his high-school boys and girls, but to train them in thought, power, and character by means of the various instrumentalities of the school, his particular subject being one among many others.

Professional knowledge and training.—The professional preparation of the ideal secondary teacher should include, first of all, a knowledge of educational psychology, especially the psychology of the adolescent period. Such knowledge constitutes a rational basis for patience and skill in dealing with the eccentricities of youth. He should know something of educational values and understand the

philosophy underlying the school course of study. This should assist him to act wisely in the adjustment of work to the needs of the individual.

Every secondary teacher should have some knowledge of school organization and administration in order that his part in it may be intelligently done. If his duties be executive to any considerable degree, his knowledge of this subject should be correspondingly greater. Some experience is necessary before the ideal teacher arrives. That experience may well be gained in a small high school under the direction of a competent superintendent or principal. The teacher will not be unfortunate if, in this apprenticeship, he is required to teach several different subjects.

The writer firmly believes that many of the mistakes made by inexperienced teachers in their first service could be avoided if they could have the advantage of observation-classes and practice-teaching under skilled supervision. However well the lecturer may tell the things to be done and the things to be avoided, the mere telling is necessarily more or less abstract in its nature. Actually seen or done they become concrete. The pupil-teacher's attention has been fixed upon an important fact or principle which might otherwise have been overlooked. The professional training of the ideal teacher should also include some consideration of the school as an institutional member of the social organism and of himself as a personal member of that organism.

III

THE PRESENT STATUS AND PERSONNEL OF THE SECONDARY TEACHING FORCE IN THE UNITED STATES

EDWIN G. DEXTER

Professor of Education, University of Illinois

The plan and method of this study.— Since there is no general prerequisite to admission to the teaching force of our secondary schools, it was recognized that the teachers themselves must be appealed to for the facts upon which to base this study. Consequently, in October, 1904, there was sent to the principals of 1,144 of our public high schools the following letter and blank:

THE UNIVERSITY OF ILLINOIS

DEPARTMENT OF EDUCATION

URBANA, ILL., Oct. 5, 1904.

DEAR SIR OR MADAM :— The next Yearbook of the National Society for the Scientific Study of Education is to be entirely devoted to the question of the preparation of teachers for our secondary schools. One phase of the question — that of the present preparation of the teaching force — has been assigned to me. In the name of that society I am, then, asking you to fill out the inclosed blank for yourself and each of the teachers of your school, and return it to me at your earliest convenience. I fully realize that such requests may seem a burden, but know of no other way to secure the information than through direct appeal to the principals.

Thanking you in advance, I am,

Yours very truly,

EDWIN G. DEXTER.

To Principals of High Schools.

THE NATIONAL SOCIETY
FOR THE
SCIENTIFIC STUDY OF EDUCATION

STUDY OF THE PREPARATION
OF HIGH-SCHOOL TEACHERS

.....School.

.....Town or City, and State.

| <i>a</i> | <i>b</i> | <i>c</i> | <i>d</i> | <i>e</i> | <i>f</i> | <i>g</i> |
|--------------------------------|----------|---------------|----------|-------------------|------------------------------|---------------------------------|
| Teachers (Name or Initials) | College | Normal School | Degrees | Present Salary | Years as H. S. Teacher | No. Subjects now Teaching |
| 1 | | | | | | |
| 2 | | | | | | |

[Space for twelve teachers.]

If initials are used in column *a*, indicate females by (*f*). In columns *b* and *c*, give names of institutions. If not a graduate, use a number to indicate years of attendance.

If pedagogical courses were taken in college, add *P* in column *b*. If practice-teaching was done in connection with such courses, add *PP*.

.....Principal.

In each instance a stamped and directed return envelope was inclosed. Since it was seen that not all the secondary schools of the country could be appealed to because of the great expense involved, it was decided, first, that only public high schools should be covered by the study; and second, that states should be selected fairly typifying the different portions of our country, and that the blanks be sent to each school within those states, as shown by the tables for public high schools in the 1902 report of the United States Commissioner of Education. The following states were therefore canvassed: Massachusetts, Connecticut, Rhode Island, Delaware, District of Columbia, North Carolina, Alabama, Illinois, Minnesota, North Dakota, Colorado, Montana, Idaho, New Mexico, Utah, Washington, California, Nevada, Indian Territory, Arizona, and Wyoming.

With the sole exception of the city of Boston, which was believed not to be typical of American high-school conditions, each high-school principal in each of the states mentioned received the blank — unless the mails miscarried. In addition to the information so received, the 261 high schools within the state of Illinois either wholly or partially accredited to the state university were studied by means of the blanks on file in the office of the high school visitor. Since, however, these did not cover the facts included in Topics 13, 14, and 15, of the following tabulation, Illinois does not figure in the study for those particulars. A few states having but a limited number of high schools failed to make any response whatever to the letters sent out, and as a consequence do not figure in the study. Those which

made a more or less general reply and so are included are as follows: Massachusetts, Connecticut, Rhode Island, Delaware, District of Columbia, North Carolina, Alabama, Illinois (as explained), Minnesota, North Dakota, Colorado, Montana, New Mexico, Utah, Washington, and California. Although in the tabulation which has been made of the returns each state was considered separately, it has not been thought wise to print the extended tables in the Yearbook, so in a general way the geographical divisions made use of by the Commissioner of Education in his printed reports have been followed. The one exception to this is in the fact that the South Atlantic and the South Central divisions are combined, the two together only furnishing sufficient data for a single group large enough to reduce the probable error due to accidental variations, to a safe working basis. The following table gives the statistical results of the study for four great geographical divisions of our country as well as the totals for the whole country. It has seemed to me that the simplest way to discuss these findings is to consider each topic of the table as shown in the left-hand column separately, or at least only to make such groupings as shall express most plainly the facts.

It is no more than right to say that the considerable labor of preparing the table has been done under my direction by Mr. C. C. Burford, graduate student in the Educational Seminar of the University of Illinois.

General conditions covered by the study.— (Topics 1, 2, 3, 4, 5, and 6.) As will be seen (Topic 1 in the table) the total number of schools appealed to for information, or for which it was already at hand, was 1,305, or about one-fifth of the total number of high schools in the country. In the next line it is shown that 583, or 44.6 per cent., are covered by the study. If we subtract the 261 Illinois high schools from that number we find that but 322 out of more than 1,000 high schools directly appealed to, or less than 33 per cent., took any notice whatever of the letter. Although I fully recognize the fact that appeals for information have become something of a nuisance, considering the fact that the request came from the National Society and that the reply was made as easy as possible and without expense, the meagerness of replies seems to me to be something of a reflection upon the general educational interest of our high-school principals. Undoubtedly, too, the meagerness of return, indicates that we are studying a selected group of high schools rather than the typical

TABLE I

| | North Atlan- tic Division | South Atlan- tic and Cen- tral Division | North Cen- tral Division | Western Di- vision | Total |
|---|------------------------------|---|-----------------------------|-----------------------|--------|
| 1. Number of high schools..... | 341 | 122 | 510 | 332 | 1,305 |
| 2. Schools reporting: | | | | | |
| Number..... | 160 | 26 | 313 | 84 | 583 |
| Per cent..... | 46.8 | 21.3 | 61.2 | 25.2 | 44.6 |
| 3. Number of male teachers..... | 421 | 101 | 817 | 234 | 1,573 |
| 4. Number of female teachers..... | 1,178 | 156 | 1,027 | 285 | 2,646 |
| 5. Total number of teachers..... | 1,599 | 257 | 1,844 | 519 | 4,219 |
| 6. Average number of teachers to schools: | | | | | |
| Male..... | 2.6 | 3.8 | 2.6 | 2.8 | 2.7 |
| Female..... | 7.3 | 6.0 | 3.3 | 3.4 | 4.5 |
| Both..... | 9.9 | 9.8 | 5.9 | 6.2 | 7.2 |
| 7. Teachers, college graduates: | | | | | |
| Male, per cent..... | 78.6 | 65.5 | 66.8 | 74.3 | 70.3 |
| Female, per cent..... | 43.2 | 23.1 | 63.5 | 74.3 | 53.3 |
| 8. Teachers with coll. training, not graduates: | | | | | |
| Male, per cent..... | 4.5 | 10.0 | 7.7 | 10.2 | 7.3 |
| Female, per cent..... | 8.7 | 13.6 | 11.8 | 8.4 | 10.2 |
| 9. Teachers, normal-school graduates: | | | | | |
| Male, per cent..... | 8.3 | 15.8 | 20.4 | 8.9 | 15.2 |
| Female, per cent..... | 6.5 | 21.2 | 16.0 | 12.3 | 11.7 |
| 10. Teachers with less than above training: | | | | | |
| Male, per cent..... | 2.3 | 2.0 | 1.7 | 2.9 | 2.0 |
| Female, per cent..... | 7.5 | 17.7 | 8.4 | 7.8 | 14.5 |
| 11. Teachers with special training: | | | | | |
| Male, per cent..... | 5.2 | 13.0 | 4.8 | 5.1 | 5.5 |
| Female, per cent..... | 3.9 | 10.0 | 6.3 | 4.8 | 4.9 |
| 12. Teachers with graduate work: | | | | | |
| Male, per cent..... | 25.1 | 24.8 | 17.6 | 22.2 | 20.7 |
| Female, per cent..... | 5.8 | 4.5 | 6.5 | 11.2 | 6.6 |
| 13. Teachers with pedagogical training: | | | | | |
| Male, per cent..... | 7.1 | 2.0 | 8.7 | 29.6 | 5.5 |
| Female, per cent..... | 5.3 | 6.3 | 14.3 | 25.9 | 6.1 |
| 14. Teachers with practice-teaching: | | | | | |
| Male, per cent..... | 5.4 | | 3.2 | 3.4 | 2.2 |
| Female, per cent..... | 2.4 | | 1.2 | 10.5 | 2.3 |
| 15. Average salary of teachers: | | | | | |
| Male..... | \$1226 | \$805 | \$956 | \$1219 | \$1145 |
| Female..... | 589 | 520 | 639 | 889 | 652 |
| 16. Average number of subjects taught: | | | | | |
| Male..... | 3.8 | 4.1 | 3.1 | 3.1 | 3.2 |
| Female..... | 3.4 | 3.6 | 3.0 | 2.2 | 3.1 |
| 17. Average years experience of teachers: | | | | | |
| Male..... | 8.9 | 7.8 | 8.7 | 7.5 | 8.7 |
| Female..... | 6.1 | 5.1 | 6.5 | 4.4 | 6.1 |

American high school. As a rule we are more willing to furnish information of which we have some reason to be proud than when the reverse is true, and undoubtedly, the general average of the schools making reply was above that for those which have kept their silence. In fact, this is plainly indicated by the returns considered by divisions and by states. If we leave out the North Central division, which is affected by a totality of returns from Illinois, the percentage of returns from the other divisions represents fairly well the relative perfection of what we have reason to believe is the condition of the high-school system. In the instances of particular states this is especially noticeable. It would be impossible to say how much allowance should be made in the conclusions of this study because of these selective influences, but certain it is that until the time arrives when full returns are obtainable, no method of study seems possible that shall eliminate them.

As shown by the figures under Topics 3, 4, 5, and 6 of the table we see that our study covers 4,219 teachers of whom 1,573 (37 per cent.) are males, and 2,646 (63 per cent.) are females, with an average of 7.2 teachers to a school. A comparison of these figures with those for public secondary schools in the advance sheets of the commissioner's report for 1903 confirms our impression that we are studying, though unintentionally, a selected group of schools, for although our study covers roughly but one-thirteenth of the schools it includes about one-sixth of the total number of high-school teachers in the country. This makes our average number per school (7.2) exactly double what the commissioner finds it for all the schools (3.6).

The relation between the sexes in the teaching force in the group of schools that we are studying and in the larger group furnishes an interesting comparison and suggests a question. As has already been stated, in our 583 schools, 37 per cent. of the teachers are males and 63 per cent. are females. In the high schools of the country 48 per cent. are males and 52 per cent. females. Yet we have stated our belief that the smaller group included the highest average of schools from the general standpoint of organization and efficiency. But this same group of schools is taught much more largely by women than is the other. Are we to conclude that efficiency in high-school work is to be gained through its feminization? Such is contrary to the opinion of the majority of general pedagogical writers who have

discussed the needs of the modern high school. It is true that the *a priori* ideas of pedagogues discussing general educational problems have little weight, and perhaps should have little, with school officers who are after real efficiency in school work. Still it has been a surprise to me to find that theory and practice are so wide apart as our figures would seem to imply. An explanation which seems plausible to me is that we have in our study but few of the one- and two-teacher high schools which abound in some parts of the country and that the excess of males in such schools gives the Commissioner his relative showing between the sexes. In support of this hypothesis I find that of the 328 public secondary schools with but one or two teachers that the Commissioner reports from the state of Indiana (chosen at random) 379 of the teachers are males while but 57 are females. This tremendous preponderance of male teachers in the smallest schools that are even classed by the Commissioner as high schools would so throw the balance of the sexes, that from his report, it would be impossible to tell what their distribution is in the better-organized high schools, and make it seem probable that our showing for the limited group has little meaning.

High-school teachers who are college graduates.—Coming now to the figures in our tabulation that have a direct bearing on the preparation of the high-school teacher, and for which so far as I know no comparative data exist, we find, first, that 70.3 per cent. of the male teachers (and it will always be understood that we mean of the group studied) and 53.3 per cent. of the female teachers are college graduates. This means, to be sure, graduates of institutions of every class from the greatest university to the smallest college, but care was taken in the tabulation to see that no recognition was given (except in Class 10) to institutions not classed by the Commissioner as of college standing. This seems to me to be a surprisingly favorable showing. Among the males there are but slight limits of variation for the different divisions. In this respect the females are in marked contrast, the South having less than one-third the proportion of college-educated women upon its high-school teaching force that the western states have, and but little more than one-half that of the East. In fact, almost the entire discrepancy between the two sexes is to be found in the South and East, the western states showing an exact equivalent between the two and the north central states a difference of but 3 per cent. The latter fact is due, no doubt, to the prevalence

of co-education in the higher institutions of learning throughout the central and western portions of our country. The tabulation, by states, of college graduates upon the high-school teaching force shows some interesting facts. Every one of the nine males reporting from Montana had his college diploma, though the group is too small to carry much weight. Minnesota and Rhode Island came next with 86 per cent., with North Dakota, California, and the New England states following close. For the women, California stands at the head, 84 per cent. (2 per cent. more than for men), with Rhode Island second.

High-school teachers with a partial college course.—The above figures, it will be remembered, are for college graduates. Topic 8 in the tabulation covers those teachers who have taken some parts of an undergraduate college course but did not complete it. We have no reason to suppose, however, that in many instances its completion is more than a question of time. The tabulation does not show the number of years taken. In this class of non-degreed college students we find 7.3 per cent. of our male teachers and 10.2 per cent. of our female teachers. If we add these percentages to those covering college graduation for each sex, we find that 77.6 per cent. of the males have come under the influence of the college, with the percentage standing at 63.5 for the women. Throughout the southern states this class of teachers—the ones with the uncompleted college course—seems more abundant than in the other parts of the country, a fact from which we might infer that in the South the college course is looked upon less as a unit than as a composite, parts of which figure as important elements in an educational career.

High-school teachers with normal-school training.—Turning now from the college-trained teacher, we come to that part of our study which covers preparation through dependence upon other parts of our general educational machinery. No. 9 is for the normal schools. From the figures given under it we see that of the male teachers 15.2 per cent. have had such training, and of the females, 11.7 per cent. In other words, out of the whole number of 4,219 teachers but 549 (239 males and 310 females), or 12.7 per cent., were from the normal schools. A study from the standpoint of geographical divisions shows, seemingly, a marked difference on the part of the high schools in the different parts of the country, in their attitude to the normal-trained teacher. In the middle West and the South nearly one-fifth

are so trained, while in the East and far West the proportion is nearer one-fifteenth. Considered from the standpoint of particular states, North Dakota has depended upon her normal schools most fully, more than 30 per cent. of her high-school teachers having been trained there. North Carolina equaled that percentage for the female teachers, but fell far below it for the males. Illinois comes next with 21.5 and 15.5 for males and females, respectively. At the other extreme comes Rhode Island with roughly 4 per cent.; California with 8 per cent., and Massachusetts, Connecticut, Delaware, Minnesota, and Colorado, each under 10 per cent. An analysis of these figures goes to show that perhaps with one or two exceptions the efficiency of the high schools varies inversely with the number of normal-trained teachers. This must not, by any means, be interpreted as meaning that the normal schools are not doing their work well. Far from it. In my opinion no branch of our public-school system is fulfilling more completely its function than our public normal schools. The figures, to me, imply that our high schools do not as a class seem to consider the normal schools appropriate sources of supply for their teaching force, and that they only use such teachers as a makeshift until others, with better academic preparation than the normal school can supply, are available. Such an attitude, if it exists, is certainly one of great hopefulness for our elementary schools, for it means that the normal schools are not likely to be tempted to devote time and energy in an attempt to train high-school teachers when their own needs are so pressing. To my mind the serious problem is not whether the high schools would suffer if the normal schools should turn their attention particularly in their direction, but whether the elementary schools could stand such a change of interest upon the part of the normal schools without serious injury.

There is shown by the blanks, though the fact is not expressed in the tabulation, to be but little lapping over of the groups of college- and normal-trained teachers, there being but fifty-six men and fifty-two women with both a normal and college preparation. Illinois is not, however, covered by these figures, since the facts were not available. Of the teachers included in both groups, eighteen men and twenty-four women, were from Massachusetts. The facts for the whole group would seem to be that between one-fifth and one-sixth of the normal graduates upon the high-school teaching force have also availed themselves of college advantages. It is impossible to tell from the records which work was taken first.

Teachers with less than the above preparation.—Where no data covering preparation were given, as well as when institutions were mentioned which were known to be of less than college- or normal-school standing, teachers were placed in this class. As will be seen, much the larger number so included were women, though even for them the percentage is surprisingly small. Compared with the numbers of persons who have even achieved more than ordinary success in other callings the high-school teachers who have not gone beyond the stage of secondary instruction is very small. In a study which I made of the educational preparation of persons mentioned in *Who's Who in America*, I found that of six hundred and twenty-five clergymen 24.4 per cent. had gone no farther than the secondary schools; of the physicians 7 per cent., of the lawyers 39.8 per cent., and of the college professors 8.6 per cent. Yet our study shows that of the male high-school teachers but 2 per cent. have made so little use of our educational machinery, and of the females but little more than one-third of the percentage of eminent lawyers.

High-school teachers with special preparation.—Topic 11 upon the tabulation covers the conditions for special oratorical or musical or other forms of æsthetic training on the part of the high-school teacher, and has no particular value from the standpoint of our general study. We are led to wonder from the figures what it is that has turned the teachers in the southern portion of our country so largely in the direction of such subjects, yet the group of teachers studied from that region is comparatively small and the excess may be accidental.

High-school teachers with post-graduate preparation.—The facts disclosed by the figures under No. 12 of the tabulation are encouraging, showing as they do, that more than 20 per cent. of our male teachers (29 per cent. of all who are college graduates) and 6.6 per cent. of the female teachers (15 per cent. of college graduates) have carried their academic or professional training beyond the stage of the bachelor's degree. In this particular there is little variation among the males for the different geographical divisions except that in the middle West there is a considerable discrepancy. For the women teachers that division is up to the average, while the far western states are nearly double the average for the other parts of the country. California and Washington are the particular states that contribute most largely to this condition.

College-trained teachers having had pedagogical instruction.—

The next two numbers on the tabulation are intended to give certain particulars regarding the strictly professional preparation of the college-trained teacher. We are forced to confess, too, that they show but little influence as yet on the part of the pedagogical departments in our higher academic institutions. From the column of totals we see that but 5.5 per cent. of the males and 6.1 per cent. of the females have made any use of such departments. This means about one college man in fourteen and one college woman in nine, the country over. The fact is not so strange as it might seem at first thought, for but few pedagogical departments, even where they now exist are more than a decade old; and No. 17 upon the tabulation shows that the average high-school experience of the teachers whom we are studying runs well up to that time. This would mean that a large number of them entered service before pedagogics were taught in the colleges. The forthcoming report of the Commissioner of Education will show that 12,192 students are now taking pedagogical courses in colleges and universities, or roughly, one in seven of the student body. The tremendous excess of pedagogically trained college students shown by the tabulation of the far West, is due very largely to the requirement in California of one year of pedagogic instruction before a certificate to teach in the high schools of the state is granted. This requirement seems to have influenced contiguous states, for all show high percentages in this particular. Except in the same region practice-teaching in connection with pedagogical instruction in the colleges is practically a negligible quantity. In Rhode Island the arrangement between the pedagogical department at Brown University and the high schools of Providence is plainly shown, for 13 per cent. of the men and 16 per cent. of the women teachers of that state report practice-teaching. Other than that, no state in the union save California alone for women, which gives 17.7 per cent. shows that more than roughly one teacher in twenty of those college trained, has had the benefit of the practice-school.

This completes our study of the preparation of the high-school teacher. The other three topics upon the tabulation, unless it be the last, having to do with the conditions under which they work.

Average salary of teachers.—For men this is shown to be at its best at the two extremes of longitude within our country—the East and the far West, the average being about \$100 a month for the twelve months of the year in those divisions. It is shown to be about

two-thirds of that amount throughout the South and three-fourths of it in the middle West. Illinois is not included in this portion of the study. My belief, however, is that it would tend to reduce the figures as given. The great difference between the valuation of man's work in the schoolroom and that of the woman is almost pathetically shown. In the East her salary is less than one-half his; in the South relatively more, though absolutely less. Both in the middle and far West the discrepancy is less, but only in the latter division does it approximate a living salary for a person occupying the place that a high-school teacher is expected to take.

Average number of subjects taught.—The figures under this heading are both an inspiration and a warning; an inspiration inasmuch as they show at least for the group of schools studied that something approximating specialization has already come in one high school, and that teachers as a class are no longer expected to cover the entire curriculum: a warning to the prospective teacher not to narrow down too closely in his preparation and so find himself out of touch with school requirements. The figures show that for the country as a whole the teacher may be expected to cover roughly three subjects. Only in the far West is the average less than that, and even there for women alone. It will be noted that throughout the country the women teachers are expected to teach fewer subjects than are the men.

Years of experience.—The figures under this heading were to me surprisingly large, especially for the women. When we consider the tremendous high-school growth during the last ten years (9,489 instructors in 1893, 24,349 in 1903), and that the recruits to the teaching force have been largely recent graduates, we are forced to believe that there are many covered by our study who are well along in years. Still this is as it should be and as we would have it.

Relative efficiency of normal- and university-trained high-school teachers.—It was intended that the part of this report assigned to me should include, besides a statement of fact as disclosed by the study already presented, as full an expression of opinion as possible on the part of superintendents and principals as to what constitutes the ideal preparation for the secondary-school teacher. For two reasons it does not seem to me best to go into any extended discussion of that question in the printed pages of the Yearbook: first, because such a discussion is already in print; and, second, it seems to me that the

expression of fact as disclosed in the tabular study is essentially an expression of opinion as to what should be. The printed material to which I refer occurs in Professor Luckey's *Professional Training of Secondary Teachers*. Since, however, it is possible that many have not yet familiarized themselves with his valuable piece of work I shall quote without comment the summary of his canvass of opinion:

As a further illustration bearing upon the same point answers were obtained from over one hundred city superintendents to the following questions: "In selecting a new teacher, other things being equal would you prefer (a) a normal-school graduate, (b) a college graduate with, or (c) without professional training?" The results show that for the grades (elementary schools) 52 per cent. prefer normal-school graduates, 44 per cent. prefer college graduates with professional training, and 4 per cent. prefer college graduates, but do not consider professional training necessary. For high-school teachers 84 per cent. prefer college graduates with professional training, 10 per cent. college graduates without professional training—"The teacher is born, not made;" and 6 per cent. prefer normal school graduates because "they are more efficient teachers," "waste less time," and "make up for lack of scholarship by skill in teaching." It is interesting to note that the younger city superintendents are almost unanimous in their preference for the professionally trained college graduate.¹

This quotation corroborates in a way my feelings stated as the second reason for not taking up an extended discussion of opinions; namely, that the facts express the opinion, at least in so far as conditions can keep up with opinion. To illustrate: The tabular study shows that 12 per cent. of our high-school teachers are normal graduates, and Professor Luckey finds that of the 100 city superintendents no larger percentage wanted teachers with that preparation. If our percentage of 12 of normal graduates holds good for the entire high-school teaching force of the country, about 3,000 of that teaching force are normal-school products; but during the last ten years the public and private normal schools of the country have graduated roughly 75,000 teachers. It would be folly to suppose that the high schools could not secure a larger percentage of them if they desired. It is possible that the small percentage of professionally-trained college graduates in high-school work, does not quite so fully express the preference of the high schools as in the previous instance; yet I am inclined to think that we of the pedagogical departments must take it as something of an evaluation of our work. Certainly if ten years

¹ Luckey, *Professional Training of Secondary Teachers*, pp. 175, 176.

from now anything like the meager showing exists we shall be forced to do so. For at present pedagogical courses are offered in nearly three hundred colleges and universities, and at the rate we are now turning out students we could in four years' time replace every high-school teacher in the country with material from our departments. If as the old ones drop out, we do not do so, it will be because our product is not wanted, and a study of facts would certainly be a study of opinion as expressed by school officers in securing teachers.

Summary and comparison.—To summarize briefly the training of our high-school teachers as a class: All have taken the equivalent of eight years of elementary school work and four years of a secondary grade. Roughly 10 per cent. stopped at this point. Twelve per cent. continued through the two years of the normal-school course. Of the men 70 per cent., and of the women 53 per cent. — a little more than 60 per cent. in all — continued their work through a four years' college course, while 8 per cent. more who started upon such a course fell out by the way. These, however, were more than compensated for by roughly 13 per cent. who supplemented their college course with one or more years of graduate work, twenty-nine out of our three thousand (Illinois not included) going on for the doctorate. The remainder of our 100 per cent. of high-school teachers have had more or less special instruction which cannot be measured in academic units. Of our college men and women 5 per cent. had had pedagogical instruction, some of them a little practice-teaching.

On the whole, this is an encouraging record, giving, as it does, an average of roughly sixteen years of educational preparation. For purposes of comparison, however, it might be well to note what the leading European nations are doing in the way of preparation of their secondary-school teachers. In England conditions are much worse than with us, both adequate secondary-school system and special facilities for providing a teaching force being lacking. For France a comparison is not easily made. But in Germany, which certainly leads all the European nations with its system of secondary schools, conditions are such as to make comparison easy. There the secondary schools are all under government control, and the training of the teacher is such a definite procedure that every step can be followed. In Prussia, which may be taken as a type of the German states, the child destined to be a teacher enters the Gymnasium at about nine years of age, after roughly three years of preliminary schooling, and

continues his gymnasial course for nine years. He then enters the university and he spends three or four years there — more frequently the latter — before undertaking his *Staatsexamen*. This is a very serious test of power, including the writing of themes as well as both written and oral examination. An entire year is usually devoted to it. Upon its successful completion a certificate of fitness to teach (*facultas docendi*) is granted and the candidate for schoolroom honors enters the *Seminarjahr*. This is spent at any one of a number of institutions under advanced pedagogical instruction. It is followed by a *Probejahr*, spent as a practice-teacher at some designated *Gymnasium*. This course having been completed, the candidate is placed on the waiting list with the probability of waiting several years before receiving an appointment. But when this comes he is sure of a permanent government position during his years of active life and a pension for the remainder of his days.

If these various steps are counted it will be seen that the teacher in the Prussian secondary school has spent nineteen years at least in his educational preparation and the number is frequently more. There are, too, no short cuts. This is in marked contrast with our own minimum of twelve years; the limit of fourteen years, which is considered respectable, the average of sixteen years and the maximum of nineteen years attained by so few as to be a negligible quantity. It is true that years spent in preparation are not the only factors to be considered in the making of a teacher, yet after all the time investment is one not to be neglected.

The minimum standard of preparation.— It is the opinion of the writer that our high-school system can never fully perform its function nor its teachers attain the status of professional respectability which should be theirs, until they have invested at least four years' time in the academic side of college work, with at least one year's graduate work devoted largely to a theoretical and practical study of school problems. This investment of time can only be gradually brought about, but I am convinced that the not very distant future will see it.

IV

THE PRESENT PROVISION FOR THE EDUCATION AND TRAINING OF SECONDARY TEACHERS IN THE UNITED STATES

MANFRED J. HOLMES
Illinois State Normal University

The increasing annual demand for secondary teachers.— In 1889-90 there were 9,120 teachers in public high schools, and 7,209 in private schools of the secondary class in the United States.¹ In 1901-2 these numbers had increased to 22,415 for public, and 9,903 for teachers in private secondary schools respectively. The average annual rate of increase of public high-school teachers for the thirteen years was about 1,000. The character and vigor of public high-school growth during the last three years will warrant the assumption that this rate of increase has at least been maintained; therefore there must be about 25,000 teachers in our public high schools at the present time (1905).

How many teachers are added annually to the high-school teaching force? To find this we shall need to add to 1,000, the normal annual increase, the number of those who fill the places of teachers that yearly quit the high-school field; but this number is not shown by any available statistics. It is entirely safe to estimate that 15 per cent. drop out each year. (E. J. Bangs, Assistant Superintendent of Public Instruction of Illinois, estimates the percentage at 15 to 25 per cent. George B. Aiton, now nearly fifteen years State Inspector of High Schools of Minnesota, says: "In my judgment, the average term of service of the high-school teacher in this state is not over four years. I exclude men who become superintendents. There are, of course, many who remain in the work for life. Many others teach but a year, two years, or at the most, three years, before marrying. I think I am safe in saying that in Minnesota from 20 to 25 per cent. drop out annually, never to return." In the light of this statement it should be remembered that Minnesota is one of the states in

¹ *Report of the Commissioner of Education* [1902], Vol. II.

which the law prevents persons with less than college graduation from competing for high-school positions.) This means that 3,750 must be added to 1,000, making approximately a total addition of 4,750 to the public high-school teaching force each year. The number of additional teachers required each year by private secondary schools may be conservatively estimated at 1,000, making an estimated total of 5,750 to be added annually to the teaching force in both public and private secondary schools in the United States. This estimate is safely below the actual demand.

The problem stated, and method indicated.—It is the aim of this division of our present study to consider what the universities, colleges, and normal schools are doing toward the education and training of these 5,750, and probably more, candidates that yearly swell the list of secondary teachers. To reach this aim it has been necessary to get at three sets of facts and conditions and examine their relation to each other as well as their significance in the study as a whole; first, the number of actual secondary teachers who have availed themselves of these opportunities for special preparation, and the extent to which they have thus availed themselves. This first set of facts and conditions was included under division III of the general subject, and has been investigated and presented by Professor Dexter. Second, the character and extent of the courses offered by universities, normal schools, and colleges for the preparation of secondary teachers; and third, the number of prospective secondary teachers who take these courses. In addition to the second and third sets of facts, which are considered in this division of the study, the present unsatisfactory status of the preparation of secondary teachers seemed to make it advisable to gather a consensus of opinion as to how universities, colleges, and normal schools can more effectively and fully meet the demand for better-prepared secondary teachers. I have therefore given this a prominent place.

Some of the facts for the basis of this division of our study were already at hand. I should especially mention Professor G. W. A. Luckey's *The Professional Training of Secondary Teachers in the United States*, and the *Reports of the Commissioner of Education*. But the present study required data both different from and supplementary to those already available. I therefore sent the following letter and questionnaire to all the public normal schools, and to 159 universities and colleges, including all the larger ones and all such

as reported to the Commissioner of Education a fair representation of students in "teachers' training classes." In addition I sent to some of the city training schools and the larger private normal schools.

ILLINOIS STATE NORMAL UNIVERSITY

DEPARTMENT OF
PSYCHOLOGY AND GENERAL METHOD

NORMAL, ILL., October 25, 1904.

MY DEAR SIR:— The problem for investigation and study now before the National Society for the Scientific Study of Education is the preparation of teachers for our secondary schools; and the next *Yearbook* will be entirely devoted to this subject.

It falls to me to report upon the present provisions made for the preparation of high-school teachers, and the number of persons taking advantage of such provisions in our universities and normal schools.

I know what it means for a busy man to take on collateral and extra duties, but I sincerely believe that the importance of this study will enlist your cordial and prompt co-operation to the extent of giving the data called for by the accompanying blank. If all the questions cannot be answered, please answer all you can, and I shall highly appreciate the courtesy and favor.

Thanking you in advance, I am

Very truly yours,
M. J. HOLMES.

PRESENT PROVISION FOR THE EDUCATION AND TRAINING OF HIGH-SCHOOL
TEACHERS

Name of School.....

Address.....

I. Courses offered to prepare for high-school teaching.

| Name, and Length of Courses (Send marked Catalogue if preferred) | ENROLLED IN THESE COURSES | | | Academic Requirements for Ad- mission to these Courses |
|---|------------------------------|------|------|---|
| | 1904 | 1903 | 1902 | |
| | | | | |

(Space)

II. To what extent do these courses coincide with those for elementary teachers?

(Space)

III. Is the amount of observation and practice under expert criticism required in preparing for high-school teaching the same as that required for elementary? If not, why?

(Space)

IV. How can the universities and normal schools more effectively meet the demand for better educated and trained secondary teachers?

(Space)

Return to
MANFRED J. HOLMES,
Normal, Ill.
(Stamped envelope inclosed)

Signed.....

Extent to which universities, colleges, and normal schools are supplying the annual demand for educated and professionally trained secondary teachers.—The returns show that about three-fifths of the universities, colleges, and public normal schools responded. A very few of those that are known to be doing anything definite in the line of preparing secondary teachers failed to respond; hence, the probabilities that the data are representative amount almost to a certainty. The following table offers a view of some of the pertinent facts concerning extent of provision for preparing secondary teachers in the United States:

| | Universities | Colleges | Public Normal Schools | Total |
|---|--------------|----------|-----------------------|-------|
| 1. Number of schools reporting..... | 50 | 42 | 93 | 185 |
| 2. Offering pedagogical instruction for secondary teachers, but intended for elementary also..... | 20 | 13 | 17 | 50 |
| 3. Courses for secondary teachers differentiated from and in advance of the elementary..... | 16 | 8 | 16 | 40 |
| 4. Having courses for preparing secondary teachers only..... | 5 | 3 | .. | 8 |
| 5. Preparing for elementary teaching only..... | 3 | 10 | 60 | 73 |
| 6. With no courses for teachers excepting regular academic..... | 6 | 8 | .. | 14 |
| 7. Requirement for admission: Jr., Sr., and post grad., usually, for universities and colleges. In normal schools only advanced students and graduates are admitted to courses looking to high-school teaching. | | | | |
| 8. Having practice-teaching, or observation | 21 | 16 | 90 | 127 |

It should be borne in mind that most of the largest and most of the best institutions of higher education are represented in the figures; and as said before, there were but few universities and colleges known to be doing anything definite and serious toward the training of secondary teachers, that did not respond. Therefore, statistics of this group will represent special provision for and output of prospective secondary teachers considerably if not far above the average for the whole number of colleges and universities in the

United States. It should be noticed that (uniting 5 and 6 in table) about 18 per cent. of the universities and 40 per cent. of the colleges make no provision for the training of secondary teachers beyond the regular academic courses. (The percentage for universities should be lower and that for colleges higher, because some of the universities in name are only colleges in fact.)

The question of how many prospective secondary teachers avail themselves of the provision for special preparation is of more immediate importance to us; but it is also more difficult to answer. My questionnaire aimed to get the number of prospective secondary teachers enrolled during three successive years. These results I intended to compare with Professor Dexter's findings; but almost without exception the numbers reported enrolled included all prospective elementary teachers. From collateral data given one is led to think that much less than half of all students enrolled in pedagogical courses in colleges and universities go into high-school work; although from some of these institutions practically all go into that field. It is safe to say that only a small proportion of the 5,750, or more, teachers entering the secondary field each year come to their work with any professional preparation. We therefore have upon us a large and serious problem to supply enough adequately prepared teachers for our high schools.

Thus far we have been considering the extent of provision made for preparing secondary teachers. We now pass to an examination of the content.

Character of the provision for preparing secondary teachers.—It is not intended that this study shall repeat anything that has already been printed in available form. For a full consideration of this question, therefore, the reader is referred to the bibliography at the close of division V; especially do I suggest Prof. G. W. A. Luckey's *Training of Secondary Teachers in the United States*. I believe every serious student of our public high schools will read this book, which is a pioneer in its line and most helpful. But Professor Luckey's book fails to give adequate consideration to at least two important phases of the general question. First, it does not show with sufficient clearness the fact that the need of more well-trained high-school teachers has compelled some of our normal schools to take hold of the problem in a large, serious way to help meet the demand. All that the universities and colleges are doing supply but

a small part of the great number that must be added to the high-school teaching force each year. Second, he leaves the reader without an understanding of the character of the work these normal schools have necessarily assumed in this line. Then, there is one sin of commission, which consists in the assumption that there should be a strict division of labor between universities and normal schools, turning over to the universities the preparation of secondary and higher teachers, while normal schools take care of the training of elementary teachers.

One must agree with Professor Luckey when considering the question merely from a historical and *a priori* standpoint; but the problem is not one that can be settled by tradition and theory. It is a problem that involves a present condition which must be met now to prevent arrested development and great loss of effective service in one of our most valuable democratic institutions—the public high school. It is of doubtful wisdom to close the question of scope and function of institutions only partially formed, and still capable of new adaptations, as our normal schools are, to meet the growing needs of the life which they exist to serve. The nature and extent of the supply and demand presses the question into the form that President Lord has given it on page 83. Only a few of our colleges and not many of our universities have taken hold of this problem with the same earnestness and devotion that they take hold of their other work; nor, apparently, with a serious sense of their responsibility in the matter. A larger number of better-prepared high-school teachers must be had, and the present outlook seems to indicate that some of the normal schools will have to be equipped to help out the situation.

One can conceive a normal school liberal in its culture, advanced and superior in scholarship, with ample and appropriate opportunity for professional training, environed and informed with those influences that make for strength of character, and force and excellence of personality. Such a normal school here and there throughout the country would be unsurpassed in the effectiveness and the value of its service. Such a course should be supplemented by travel, and residence at a university for special graduate and research work. Such would be a normal college, and would furnish all that is needed for the education and training of secondary teachers, excepting advanced specializing and that necessary view of the world which comes through travel and contact with men and things. In its

proper place will be shown what some of the normal schools are doing in response to this demand for preparing secondary teachers.

The different classes of organization deserving consideration that at present contribute to the preparation of secondary teachers are (1) teachers' colleges (or equivalent) organized co-ordinate with other colleges at a university; (2) departments of or courses in education at universities; (3) colleges, in the true and proper sense of that word, that have a department or courses in education; (4) normal colleges that offer full collegiate academic courses, included with and in addition to which adequate provision is made for the professional education of secondary teachers; (5) normal schools that offer special courses and advanced electives to help meet the crying demand for more and better-trained high-school teachers. We shall now examine the content and scope of provision made by these several classes of school and organization.

(1) *Teachers' colleges, or their equivalent, at universities.*—Of these there are now four; namely, Teachers College at Columbia University, The School of Education at the University of Chicago, Teachers College at the University of Missouri, and the College (?) of Education at the University of Texas. The oldest of these and the one thus far best developed is Teachers College at Columbia. It is rising into great meaning and dignity as a national factor in the education and training of teachers. All the teachers' colleges will no doubt take pretty much the same trend in scope and character of work; so it will suffice to indicate the provisions at Columbia for preparing secondary teachers.

The courses may be divided into two main groups; (1) general professional courses, and (2) special professional courses. The first group includes, in the main, all that body of knowledge that every teacher needs, whether he teaches in the university, the normal school, high school, or the elementary grades. The second group includes a knowledge of the subject-matter and the method of the subjects that make up the high-school courses. The following may not include all that is offered for secondary teachers at Columbia, but it will be enough to show scope and character. I cite from Teachers College Announcement:

I. General professional subjects.

History and principles of education.—The aim of this course is to present the essential features of educational thought and practice of the past as

a basis for the more detailed historic, philosophic, and methodic study of the principles of education as formulated in the present.

Modern educational theory.

Practicum in philosophy of education.—The purpose of this course is a somewhat detailed examination of the fundamental principles — philosophical, historical, and psychological — which underlie a scientific theory of education, considered as a human institution. The processes and the problems of education are examined from the standpoint of the history of civilization and the doctrine of evolution, and an attempt is made to formulate a philosophical basis for educational doctrine and practice.

School administration (organization and management).

Educational psychology.—This presents the general principles that control successful teaching so far as they can be derived from psychological laws and from the study of school practice. It prepares students for general classroom work and for courses in the methods of teaching the separate subjects. The work in the sections is specialized to meet the particular needs of the several classes of students.

Child-study.—This course is designed to present the facts, so far as they have been scientifically determined, concerning the nature and development of the mind during childhood and adolescence, with special reference to the meaning of these facts to the teacher.

II. Special professional subjects.

Secondary education.—This course will consider the aims and the subject-matter of secondary education, the systems of instruction prevalent in American and in European secondary schools, the arrangement and adjustment of the curriculum; it will dwell on the general questions of sequence and choice of subjects, on equipment of the secondary school, on its relations to the elementary school and the college. Students will be expected to study the organization and management of the various types of secondary schools in New York and vicinity (the Horace Mann High School, the public high schools, and typical private schools).

Practicum. The secondary-school curriculum.—Students are required to undertake the study of special problems in secondary-school work, to investigate the conditions underlying various types of schools in this country and abroad, and the effect of these conditions on the curriculum; special attention is directed to the needs of the public high schools.

Seminar in secondary education.

Theory and practice of teaching biology in secondary schools.—The work embraces a study of the aims, materials, and methods involved in the teaching of botany and zoölogy in the secondary school, and is accompanied by practical work consisting of critical observation of the work as carried on in the Horace Mann School.

Practicum in botany and zoölogy.—A critical study of materials and methods employed in the teaching of botany and zoölogy. . . . This course is designed for intending teachers in secondary schools and colleges, and for those preparing themselves for supervision.

Theory and practice of teaching Greek in secondary schools.—In all the work the needs of the teacher in the secondary school will be kept steadily in view.

[The courses in the theory and practice of teaching secondary-school subjects include, in addition to the above, English, history, mathematics, art, domestic art, manual training, Latin, German, French, geography, physics, and chemistry.]

Three years' college work in the subject is the minimum academic standard for admission to a method course.

The same amount of practice-teaching and observation is required of prospective high-school teachers as for those looking to elementary work.

Practical work consists of observation, assistance, and class instruction in the Teachers College schools. Observation includes systematic study of the selection and arrangement of materials for a series of lessons designed for a particular class, a consideration of various methods of presentation, observing the presentation of the several lessons, or series of lessons, by the regular teacher, and rendering a critical summary of the results obtained. Practice in teaching is given first in the instruction of individual pupils, or small groups of pupils, who may be in need of special assistance, and later in the regular instruction of an entire class or grade. The minimum number of hours which must be devoted to practical work is indicated in connection with the several courses. All students are required to do the full amount of practical work prescribed for any course; advancement from observation to assistance, and from assistance to class teaching, depends entirely upon the candidate's ability to do the work required.

Dean Locke, of the School of Education at the University of Chicago, Dean A. R. Hill, of Teachers College at the University of Missouri, and Professor Sutton, of the College (?) of Education at the University of Texas, all report solid improvement and gratifying prospects. The School of Education at Chicago has taken about the same form and scope as her sister at Columbia.

(2) *Departments of education at universities.*—The most of the universities have their pedagogical work organized as a "department of education." Quite a number do not give the professional preparation of teachers enough attention to warrant an independent and distinctive designation of that work, though a few that have not

yet organized their pedagogical courses into a "department" are doing work on a par with those universities that have the work so organized. The courses of any one of several universities could be cited to represent this class of provision for preparing secondary teachers. For convenience I let the courses offered at Brown University represent this class. The data are taken from the catalogue.

History of educational theories and institutions.

A critical study of modern education.

The fundamental principles of education.

Seminary in educational problems.

The psychology of education.—The principles of psychology applied to method in education and instruction.

The hygiene of education.—The hygiene of growth. Play and fatigue. Sight and hearing. School diseases. School architecture. Warming, ventilating, and lighting. Sanitation. School furniture. School programs.

Practical introduction to teaching.—Organization of school systems. Management and discipline of classes. Observation of good teaching. Practical applications in method.

Methods in secondary-school studies and the organisation, equipment, and management of secondary schools.—Required of student-teachers. Elective for graduates and experienced teachers. Each term may be elected separately. Importance and meaning of secondary-school studies and their organization into a curriculum; method as applied to each subject and the resources at the command of the teacher; such a view of the work of the school as is necessary to the teacher in order that he may understand the whole and co-ordinate his work with the whole. The following studies receive especial attention: first term, Latin and modern languages; second term, history and English; third term, science and mathematics.

Training in practical teaching (through the year).—Practice-teaching. Control and conduct of classes, plans for single lessons, and for "method-wholes," observation of the work of experienced teachers, reports, private conferences. Opportunity for practice-teaching in the high schools of the city is given to capable graduate students, and in the grammar schools to a limited number of seniors preparing to teach in the grades or to fill places as principals or superintendents.

By special arrangement with the School Committee of the City of Providence, student-teachers are appointed to places in the Providence high schools. Appointments are made from members of the Senior class who have pursued undergraduate courses in Education. These student-teachers are of two types. Those of the first type — of whom there are at least six (three of each sex) — under the guidance and direction of experienced teachers, have the control and conduct of classes. The time required each day is somewhat more than half

the usual school session. They receive a salary of four hundred dollars a year from the city. Those of the second type are occupied in a similar way from three to five hours a week. They receive no remuneration from the city. An unusual opportunity is thus afforded student-teachers to gain a thorough knowledge of the theory of education and at the same time practical experience in the art of teaching. In making appointments to places as teachers of the lowest grade in the Providence High School preference is given to those who have successfully accomplished the course as student-teachers. In this respect student-teachers of the second type have the same status before the committee that makes appointments as those of the first type.

(3) *Colleges that have courses or a department for preparing secondary teachers.*—A small proportion of the colleges give any considerable serious attention to the professional preparation of secondary teachers; but some are doing valuable work in both scope and character. The courses offered at Cornell College, Mount Vernon, Iowa, are here used to represent the best of this class.

Recent endowments for both the department of Education and that of Psychology have made possible most excellent library facilities in these fields. The leading works in English in both lines are now in the library, and additions are constantly made.

In addition to the courses outlined below, a year's course of elementary studies in Education is offered in connection with the work in the academy.

Graduates of the college who complete two or more years of work in Education receive special recognition and indorsement by being granted a professional diploma in Education. The following courses are offered:

School organisation and management.

Psychology and teaching.

History of education.

Genetic psychology.—A systematic course in theories of mental development and of the psychological basis of educational theory. The psychology of adolescence will receive special attention, and this will be followed by a topical survey of recent literature on educational psychology.

Secondary education.—The history of the development of the American high school. Its purpose, organization and relation to the community; construction of courses of study; various problems peculiar to the high school.

Principles of education.—The meaning of education, its significance to the individual and to society. The relation to the two chief factors in the educational process—the subject-matter and the child. The function of the teacher and the school. The basis of method and its relation to teaching. A study of the child as an educable being.

The high school: educational practice.—This course seeks to organize the results gained in the previous courses and to make application of educa-

tional principles particularly to high-school work. The foundations of method, and methods of teaching the various branches in secondary schools, are the principal lines of study. An opportunity will be given to pursue topics of study having in view the fitting of the student for some particular line of school work.

(4) *State normal colleges*.—In name or in fact this class of school is represented in nine different states; namely, Alabama, Colorado, Iowa, Michigan, Missouri, Montana, New York, Oklahoma, and Tennessee. They vary in their constitution, and in this discussion reference is had only to those that offer what is designed as the equivalent of a collegiate academic course, conferring degrees. This type of normal school has arisen in response to the demand for a school that will provide professional training for teaching and at the same time furnish ample means for liberal education. There are valid reasons for thinking that these schools will be able to render efficient service in preparing for secondary teaching. Whether they do this will be determined by several factors, the most determining of which is the course of study. I say this because the course of study will to a large degree determine the standard of the teaching force employed.

We shall now examine one of the courses offered at one of the best of these schools to see its scope and content, and judge how well it is adapted to meet the requirements, both academic and professional, of preparing teachers for secondary schools. If this course is not representative it is because it is of a higher standard than the average offered by this class of school. I cite the course leading to the A.B. degree in Education at the State Normal School of Iowa, quoting portions of the catalogue that have an explanatory bearing.

Bachelor of Arts in Education.—A four-year course of study beyond the preparation granted by secondary schools. The requirements for graduation are equivalent to university courses. Preparation for teaching in high schools, for administration in principalships and superintendencies demands much more than scholarship; as a knowledge of teaching should be also attained and that knowledge should be both theoretical and practical. It is not enough to be a scholar or to have studied the theories of education in class work; there should also be training in the expert elements that constitute the instructor, the supervisor and the executive. . . . To meet the needs of a growing class of students who are fitted by nature and by scholarship for high-school teaching and for executive duties, the following conditions are made for those who desire to be candidates for the degree Bachelor of Arts in

Education. This is not a new movement at the Normal School because the Board of Trustees at the organization of the work in 1876 adopted this degree, this standard of graduation, and this kind of course of study for teachers. For the first time the plan is outlined, as the needs and requirements of the present time dictate.

For unconditional admission to the first year of the course, the applicant must present credentials from secondary schools certifying to fifteen years of work selected from the following lines of study:

- I. English (1) Composition and Rhetoric.....one year
(2) Literatureone year
- II. Mathematics (1) Algebra and Plane Geometry.....three years
(2) Solid Geometry and Trigonometry.....one year
- III. Science (1) Physics.....one year
(2) Chemistryone year
(3) Zoölogyone year
(4) Botany and Physiography.....one year
- IV. Latin (1) Lessons, Readings and Cæsar.....two years
(2) Cicero and Vergil.....two years
- V. German (1) Lessons, Readings.....one year
(2) Minna von Barnhelm, William Tell.....one year
- VI. Foreign Languages. Greek and French will also be given credit if presented as preparatory work.....each two years
- VII. History and Civics (1) General and special.....two years
(2) Civil Government and Economicsone year
- VIII. Since this is a teachers' school, special requirements in music, drawing, or in other branches not here listed will be given allowance for special courses where such work is essential.

[These entrance requirements are based upon the standards indorsed and accepted by the College Department of the Iowa State Teachers' Association.]

The degree Bachelor of Arts in Education will be conferred when the candidate has secured forty-eight term-credits, the meaning of term-credit being twelve weeks' work of five lessons a week.

Academic studies.—[Thirty-six of these credits are academic, and twelve professional. Three credits in English, and three in mathematics are "required constants;" the remaining thirty of the academic studies are elected. Two years of literary-society work, and two years of physical training are required without credit. The elective studies must be taken from the following groups: English, mathematics, history and civics, science, Latin, German, physical training, public speaking, and vocal music. Excluding the last two, the groups offer from six to eleven courses each.]

Professional studies.—The assignment in these lines consists of twelve

term-credits to be assigned from psychology, methods of instruction of various kinds, school management and supervision, history of education, philosophy of education, American education, modern education, and specific work in the training department. Teaching classes, inspecting classes at work, supervising the work of teachers, criticism of work being done constructively and helpfully, details of executive business, etc., will all receive attention as the individual scope of the student's future plans will permit. This field of study will in each individual case be planned by the faculty and definitely outlined when the plan and the course to be elected is known. Such an arrangement allows proper differentiation and recognizes the individual capabilities of those in preparation for high grades of professional teaching.

In addition to the above other advanced courses are offered lead-to the Bachelor's degree in Didactics, and the Master's degree in Didactics.

Two large, and one might say precious, interests are involved in this movement toward state normal colleges; first, the better education of the people through well-prepared teachers; and second, the ideals and respectability of American scholarship. These normal colleges have placed themselves under responsibility to both these interests, and to justify their existence and establish their acceptability they must acquit themselves with creditable efficiency.

(5) *State normal schools that offer advanced courses and electives for preparing high-school teachers.*—As in the case of the normal colleges, most of the colleges proper, and many of the universities, this group of normal schools gives the same general professional courses to all students whether they are intending to teach in elementary or in high-school grades. The specific preparation offered is found in advanced academic subjects (chiefly electives), and method of the high-school studies. At some of these schools an optional system is in vogue, whereby a student may substitute advanced high-school subjects for studies in the regular course. Judging from the returns, there are many normal schools that are doing considerable along this line. The practice department of these schools gives the prospective high-school teacher experience in the grammar grades, and sometimes in the high school.

It will be well to let some of these schools speak for themselves.

ALBERT SALISBURY, State Normal School, Whitewater, Wis.—The normal schools of Wisconsin do not have any course of study especially designed for those intending to teach in high schools. . . . Many of our graduates do

teach in high schools; some of them are principals of high schools and city superintendents. . . . We encourage persons looking toward high-school work to do postgraduate work; and many of them continue from half a year to a year, taking culture studies, for the most part, that were not included in their particular course.

One thing more ought to be added. Graduates from our advanced course are admitted to junior rank in our State University, which provides a course for normal graduates known as the Philosophical Course. Many graduates of our Wisconsin normal schools pass on to the university. We consider this to furnish an ideal course for high-school teachers. . . . People who have taken this course, graduating first from the normal school and then from the university, are much in demand in this state for high-school positions.

J. M. GREEN, New Jersey Normal School.—Only those who are graduates of four-year high-school courses before coming to us could think of becoming teachers in high schools. For them there is a two-year course of twenty-four units, twenty of which are required and four elective, and an elective year in which they may confine their time to six units, three at a time. A person taking this course would be capable of teaching in a high school the subjects in which she has specialized, quite as well, I think, as a graduate of an ordinary college course, so far as her knowledge of subject-matter is concerned, and better so far as her knowledge of method is concerned. I think there are about ten or twelve taking this course all the time.

DAVID FELMLEY, Illinois State Normal University.—One-fourth of the entire school expect to become high-school teachers.

Thus far we have considered the magnitude of the annual demand for secondary teachers, and the extremely inadequate supply of specially-prepared persons to meet that demand. We have also examined the character and scope of the provision made by our universities, colleges, and normal schools for preparing secondary teachers. Of the points that yet remain, I shall touch but three.

Practice-teaching.—There is great difference of opinion as to the amount of practice-teaching that is necessary for prospective high-school teachers. The following responses to point III in the questionnaire will show the trend of thought:

DAVID S. JORDAN, Leland Stanford University.—There is no amount of observation and practice under criticism now required for this particular [state] certificate. It is proposed soon to require a certain amount of this in addition to college graduation, not as a part of it.

G. W. A. LUCKEY, University of Nebraska.—[Professor Luckey discusses this in his *Professional Training of Secondary Teachers*, pp. 207-13.]

DAVID R. MAJOR, Ohio State University.—Unfortunately our students have no opportunity for either observation or practice.

J. R. STREET, Syracuse University.—No. College men and women do not need such minute drill as younger students.

W. S. SUTTON, University of Texas.—Up to this time no provision has been made for this very necessary work. It is hoped that a vigorous beginning will be made in the fall of 1905.

CHARLES DE GARMO, Cornell University.—Impossible to finance a secondary school for observation alone. Practice is out of the question.

FREDERICK E. BOLTON, State University of Iowa.—As yet we have no practice school. I hope that at some time we shall have a practice school or at least a model school where our teachers can have opportunity for observation and some practice. I do not believe it is necessary to have practice too extended. I think that many of our normal schools entirely overdo the matter of amount of practice. . . . The universities have been at fault . . . in that they have [had] no model schools or practice-schools. I think the education of the teacher is not complete without opportunity to work in such a school.

To what extent do courses for secondary teachers coincide with those for elementary teachers?—The returns show that much of the work done in the training of secondary teachers in universities and colleges coincides with that done for elementary teachers. The advantages and objections to this ought to be brought out clearly.

How can universities and normal schools more effectively meet the demand for better educated and trained secondary teachers?—That it is an imperative necessity to have more and better-prepared high-school teachers has been demonstrated. How improvement and extension of provision made can be brought about is an unanswered question. Some of the responses to this question are significant.

G. W. A. LUCKEY.—By mutual assistance, division of labor, and a more thorough study of the problem. (See pp. 228 ff. of his *Training of Secondary Teachers*.)

GEORGE H. LOCKE, University of Chicago.—I believe it is the function of the departments of education with school laboratories attached. I cannot believe in the training of secondary-school teachers away from a university.

DAVID FELMLEY, Illinois State Normal University.—The normal schools by furnishing (1) strong courses in the high-school branches, including discussion of the method of instruction; (2) courses in psychology and general method; (3) advanced courses to be obtained at the university.

HOMER H. SEERLEY, State Normal School, Cedar Falls, Iowa.—There is more to do than all [universities and normal schools] can accomplish in this field. Let the fit survive. Have respect for one another.

CHARLES DE GARMO, Cornell University.—Normal schools cannot do this work without extending their courses until they cover the work of the university.

E. M. SHACKELFORD, State Normal College, Troy, Ala.—This is a hard problem to solve. If we raise the requirement for admission, we can make the few who would graduate more efficient; but in doing so we cut out of these schools entirely a great many who are now trying to teach and who should be induced to attend for better preparation.

JOHN W. COOK, State Normal School, De Kalb, Ill.—(1) By having a high-school department for observation and training purposes. (2) By the organization of professional courses which shall be closely correlated with the work of such a training school.

C. C. VAN LIEW, State Normal School, Chico, Calif.—By having both supply experience (i. e., practice) courses to the amount of fully one-half of the professional work. Possibly by letting each, in lieu of something better, exchange those lines of work each can best furnish; i. e., the normal school, experience in teaching; the university or college, culture.

G. STANLEY HALL, Clark University.—In order to meet the need for better secondary teachers I think our universities and colleges must first appoint better men as professors of pedagogy and give them more liberty. Many who hold these chairs now are without any special qualifications except having taught. They do not read French or German and have little knowledge of philosophy or psychology, which topics are the Blackstone of pedagogy. Many of them, again, are inherently good men who would develop well if they had a chance; but they are obliged to work under the following handicaps: first, some must give much of their time to colporteur work among the secondary schools, examining them, and placing college graduates as teachers and corraling in students for the next freshman class. Half their time at least they must be drummers for the college.

The second handicap is they are not allowed enough academic freedom. For instance, they can talk about lower grades of education but they must stop short when they come to the university or the professional school. If they discuss these they interfere with the traditional rights of the President. Thus, being condemned to the lower grades only, their mental horizon is narrow, their course robbed of much of its dignity, and a fence, purely arbitrary, is run through the middle of their work.

Many of our academic professors of education have consciously or unconsciously, directly or indirectly, in view nothing whatever except more students for the college they serve, and this makes them interested in nothing but high-school work. They know or care little about the grammar schools, or still less the kindergarten, and they and the college textbook-makers have laid a heavy burden upon secondary education which they have tried to rob of its due

freedom and have made their work so distasteful that there is a silent but growing prejudice against their work.

Then, again, the fact that many normal schools have undertaken to train secondary teachers with faculties or other facilities that are inadequate to its purpose is another [handicap].

W. S. DEARMONT, State Normal College, Cape Girardeau, Mo.—The three state normal schools of Missouri decided two years ago to offer full college courses for the purpose of preparing teachers for the secondary schools. It is our purpose to make the normal schools of Missouri, teachers' colleges. I mean by that term that we are offering in addition to thorough pedagogical training, strong academic courses equal in every way to the undergraduate courses of the best colleges and universities. . . . It is our intention to make the college course the course that teachers who are preparing for secondary work will take in the normal schools; . . . and to have a high-school department of our training school for the purpose of affording an opportunity of observing and teaching in secondary work.

We believe that we shall not only be able to give teachers the academic training that is required for secondary work but thorough pedagogical training for the same work, also. I believe that the plan that has been adopted by the Missouri state normal schools is well calculated to do much toward solving the problem of better training of teachers for secondary work. We believe that our plan will result in college men giving more attention to elementary and secondary education than this class of men now give.

In summing up the opinions under the last question of the blank I find it easy to group the suggestions under quite definite headings, the chief of which are given herewith, each followed by the number of opinions that coincide on that point. The explicit statements only are recorded.

(1) By requiring higher standards of general scholarship and cultivation, 31.

(2) Courses especially designed for secondary teachers, including both subject-matter and the method of high-school subjects—more of these and longer in both universities and normal schools, 58.

(3) By better provision for observation and practice especially adapted to the needs of high-school teachers, 21.

(4) By professional courses for college graduates, especially designed to prepare secondary teachers, 35.

(5) By establishing and maintaining higher standards of professional preparation, especially through state and municipal legislation, 14.

(6) By having better teachers who do this work in universities, colleges, and normal schools, 10. (This was evidently meant to cover, in most cases at any rate, scholarship, character and personal traits, and skill.)

(7) By devising a more rational and satisfactory way of selecting and certificating these teachers, 5. (Some mentioned the great need of more carefully selecting young people peculiarly adapted personally to high-school work, and inducing them to enter the high-school field.)

(8) By a more effective exclusion and elimination of the unfit, 3.

(9) By making the science and art of teaching more a problem of dealing with individual lives than with subject-matter, 4.

(10) By having normal graduates take university courses, 3.

(11) By more careful study of high schools — what they mean, are doing, and what they need, 5.

(12) By improving the economic status of teachers — better salaries, longer term of service, promotion on merit, 5.

(13) By a more generous support of normal schools by the state, 2.

(14) By more and better summer schools for teachers, 2.

(15) By securing teachers with good athletic training, who can understand the physical needs of youth, and make sports yield their true and legitimate values.

(16) By establishing state normal colleges which shall furnish both cultural education and professional training, 6. (These schools are starting up with the zeal of a "calling," and the confidence of certainty that they are greatly needed.)

Conclusion.—In closing this partial presentation of provision made for, and opinion concerning, the preparation of secondary teachers one will hardly venture to make many comments, either critical or prophetic. Yet a few things are clear:

(1) That our middle schools have been called into being to serve a great and legitimate purpose in the evolution of democratic life and institutions. They are the meeting and unifying ground for rich and poor, high and low, Greek and barbarian. Our national life in its higher aspects of character and social service must be continually renewed by discovering and drawing up into itself through the high school those individuals that have natural capacity, talent,

or aspiration for the higher life of personal worth and service. Thus viewed, what a noble conception is embodied in our high-school system! And who can measure the splendid opportunity presented to those who are responsible for making the high school perform its full function?

(2) That the opinion of representative men in the high-school field itself is practically unanimous as to what constitutes the ideal secondary teacher.

(3) That the status and personnel of the present high-school teaching force is far from what it must be in order to give these schools their maximum of efficiency.

(4) That the present provision for the education and training of secondary teachers is entirely inadequate in extent, and in most schools that attempt preparation of secondary teachers, not very satisfactory in character. Some of the universities, colleges, and normal schools are making progress in the effective solution of this problem; but all these schools together supply only a small fraction of the teachers that newly enter the high-school work each year. Nor could they do much more if the demand were made upon them; because few of them are adequately provided with plant, equipment, and teaching force. But it is safe to say that no great demand will come until standards of preparation are advanced by legal act.

(5) That it is an entirely unsettled question as to what schools can now, and will hereafter best prepare for secondary teaching; and that at present all the help of all the schools that can do the work at all respectably is needed; that normal colleges appear to be a necessity in this field.

But the relative advantages and limitations of universities and normal schools in preparing secondary teachers is presented by a symposium of opinion in the final chapter of this book.

V

RELATIVE ADVANTAGES AND LIMITATIONS OF UNIVERSITIES AND NORMAL SCHOOLS IN PREPARING SECONDARY TEACHERS

LIVINGSTON C. LORD, President State Normal School, Charleston, Ill.
G. STANLEY HALL, President Clark University, Worcester, Mass.
HOMER H. SEERLEY, President State Normal School, Cedar Falls, Ia.
CHARLES DEGARMO, Professor of Education, Cornell University, Ithaca, N. Y.
C. C. VAN LIEW, President State Normal School, Chico, Calif.
EDMUND J. JAMES, President University of Illinois, Champaign, Ill.
J. N. WILKINSON, President Kansas State Normal School, Emporia, Kan.
M. V. O'SHEA, Professor of Education, University of Wisconsin, Madison, Wis.
L. H. JONES, President Michigan State Normal College, Ypsilanti, Mich.
CHARLES B. GILBERT, Many years' experience as superintendent of schools in large cities.

Some essential questions and theses logically arising out of this division of the study:

1. Opinion is now practically unanimous that the vital relation of the high schools to the welfare of the people demands teachers especially fitted and prepared for teaching youth.
 2. What constitutes the best course of education and training for high-school teachers?
 3. In what schools can these courses be most effectively offered?
 4. Should not the National Society select a strong, representative committee to study question 2 and formulate the results of such study for printing in the Yearbook?
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LIVINGSTON C. LORD

President Eastern Illinois State Normal School, Charleston, Illinois

The time has now come when the training of teachers for secondary schools should receive serious attention. Whether this work should be done in schools especially established for the purpose, or in schools connected with our universities, or in some of the state normal schools, is an open question. Each plan has its disadvantages, and there are strong arguments in favor of each.

The thing, however, which is of cardinal importance is that

teachers of high ability and special fitness be assigned to this work. Teachers who attempt to train secondary teachers must be of the highest character both in scholarship and in teaching skill; something more than lecturers or compilers of statistics; in scholarship, broad and in some things really fine; in teaching skill, sound not only in theory but also in practice; in thinking, not too ready to believe that every educational principle has been discovered and that every teaching act can be referred to such principle.

Finally, two conditions are to be avoided, each of which is worse than the other. First, the point of view of those of limited attainment, with alert but not profound minds, who, while helpful to those who expect to teach in primary schools, would not be respected by teachers preparing for high-school work; second, the point of view of the teacher of pedagogy with pretentious phraseology who discusses what he is pleased to call the pedagogy of a subject of which he knows little.

G. STANLEY HALL

President Clark University, Worcester, Mass.

I think preparation of secondary teachers should never be permitted in a normal school where primary teachers are trained, but should be entirely given over to the university. This is essentially the case in Germany, although terms and definitions vary a good deal. I think there is very little in common either in methods or matter in the curriculum proper for these classes of teachers. I have so often expressed my opinion more fully with the grounds therefor that I will not enlarge here.

HOMER H. SEERLEY

President State Normal School, Cedar Falls, Iowa

The education and training of teachers.—The preparing of teachers for their careers is a business which demands more than an opportunity to attend a good school and acquire a good grade of scholarship. Teaching public school is a profession of a high grade if the work is properly understood, as it involves the conduct of affairs of the most expert character. The right preparation of a teacher involves a knowledge of the philosophy, the theory and the practice of education in addition to the scholastic knowledge universally conceded. There is the necessity to acquire a right attitude, a true spirit

and the power of efficient instruction to be a teacher of importance and worth. Secondary education is not free from these necessary conditions as those who instruct in its field need just as much care and supervision in their right training, if they are to be superior in power and skilful in service, as is required of elementary teachers.

The university and secondary education.—The university idea of education does not necessarily require such a standard of attainment and professional excellence, nor does the university give such advantages and such courses of study; for it assumes that all secondary education has ended when the student enters college studies and devotes himself to higher education. It is also assumed by university management that when advanced courses have been completed in the college classes such person is specially well qualified for the profession of teaching in secondary schools. This assumption is far from the truth as there is not necessarily any such assurance of expert attainment and capability when the college graduation has been reached.

The normal school and secondary education.—The normal-school idea is variable because there is at present no uniformity of plan or effort; but as a rule the normal school proceeds on the theory that all training in secondary studies is not completed on graduation from a secondary school, and that there are advanced courses for teachers in the branches of study assigned to the curriculum of the secondary school that ought to be taken by all would-be teachers in said schools. The special function of the normal school is to give the right spirit, the correct attitude and the needed initiative to teachers in all the grades of the public schools and by a proper extension of the present program of studies, normal schools can give superior training and education for all kinds of secondary teachers and not go outside of their true and proper province. A rightly organized and equipped normal school must have more elaborate and extended opportunities as to apparatus and library for individual work and training than may be necessary for a college or a university, because the preparation of teachers involves more explicit study and accomplishment than the general courses that are given to students who are in preparation for law, medicine, and other special professions. The province of the normal school is to train kindergartners, primary teachers, elementary teachers, music teachers, art teachers, manual-training teachers, domestic-science teachers, physical directors, and

all other kinds of teachers that are needed for public schools of all grades, not excluding even those of the secondary school. It is also fitted in spirit and in tradition to do this work better than the university or the college because such institutions are not offering the courses and are not by tradition disposed to give the kind of opportunities that practical and expert public-school teachers positively need along the lines that the service expects and requires.

The demand to recognize a reasonable differentiation.—It must also be recognized that there is a necessary differentiation in educational training for the teaching career. There are innate differences between kindergartners, primary teachers, elementary teachers, and secondary teachers that are not obliterated by courses of study and scholarship. The secondary teacher is not such because he has had a more extended scholastic preparation. There is such a thing as individual fitness for becoming a primary teacher, and there is just as much individual fitness of another kind necessary for the secondary teacher. It is the individual fitness that is the first requisite and this can be found out by the person alone who is being prepared for a career. It is not possible to develop a primary teacher out of any woman who should undertake the study and the training deemed essential, nor is it possible to develop a secondary teacher out of anyone by submitting such person to the plans and the demands of a different course of education. Teaching is not a question of degree but of kind and the students must be differentiated as to promise as to kind, rather than as to degree of scholarship attained. Students who enter normal schools can almost all of them be trained for some kind of effective work as teachers, but they cannot all be made at the will of the management into primary teachers, or elementary teachers, or secondary teachers. The special type of mind, personality, and adaptability that an individual possesses decides the question of a career and these characteristics are not known before they enter school, for their training and education test their capabilities and decide their limitations. It is fair to every teacher being educated for such a career that he become what he can do best and most comfortably, so that his future has its largest possibilities. It is likewise true that a university education does not change a real primary teacher into a superior worker in secondary schools, for scholastic acquirements do not create gifts or capability.

The limitations in the preparing of secondary teachers.—The

limitations that are thus found in the experience of preparing secondary teachers are due to the tendencies and the purposes that are existing today in the organization of the university and the normal school; the former being assumed to be an educational institution for general culture, and the latter, as commonly organized and conducted, a technical school of small expectations, meager courses, limited equipment with no province to give opportunity for culture and scholarship. The normal school that has opportunities for advanced scholarship and broad courses does not for that reason become either a university or college as its organization, spirit, and management is totally different, making it just as efficient in preparing secondary teachers as it could make it in preparing primary teachers. The viewpoint of the normal school, its manner of conduct, its aim of instruction, and its results in training are such that it can never become either a university or a college and has little in common with them as educational institutions. These differences are pronounced, and they only need fair investigation to establish the fact of their existence.

The normal school as a public educational institution had its origin through legislative enactment, and has always emphasized the importance and the necessity of special instruction in the history, theory, and principles of teaching and of actual training through personal teaching under expert supervision, as the essential characteristics of a proper preparation for a successful teaching career. While this contention has not been cordially accepted by the university, it is to be recognized that as time has passed the merit and practicality of these ideas and principles have gained such headway that the universities have been compelled to establish chairs of education in the endeavor to meet public demand, and in some cases even have gone further and organized affiliated schools which are called "schools of education," "teachers' colleges," "normal colleges," etc.

Until the normal school had won its place and had attained the recognition of public esteem, it never occurred to any of the higher educational institutions that such work was either desirable or necessary. The particular objection that may be offered to this change of policy by the university is that it usually claims superiority over the normal school in this particular line of teaching, even when its requirements, standards, and courses are only equivalents to the normal schools, thus loaning its prestige and power as a higher institution to give rank to its graduates above their actual acquirements and

merits. All that the normal school has a right to ask is, (1) to be let alone in its endeavor to do its particular kind of work, and (2) if the universities duplicate its province, that they may be willing to call things by the right names and not assume that such work has become university work in reality by being under the direction of such a type of educational institution.

The example of increased opportunities.—To give a practical explanation, in conclusion, the record of the Iowa State Normal School is cited, not because its scheme of work is ideal nor its plans perfected, but because its organization permits the training of all classes and kinds of public-school teachers. This condition has existed for only a few years and yet its graduates have already taken an active part in the work of secondary education. It is true that they are among the more successful teachers, and that their influence upon the spirit and the tendencies of education is unequaled by any equivalent number of teachers who have received their training in other kinds of educational institutions. The following table will show what is now the work in secondary education of such graduates. For complete information the following will be the order: Column I will give the kind of work done: Column II the total number of normal-school graduates in such work; Column III the number of these graduates who have also graduated afterward from colleges or universities; and Column IV the number who have received all their preparation in the normal school.

| | | | | |
|------------------------|---------|----|----|----|
| High-school principals | - - - - | 26 | 7 | 19 |
| City superintendents | - - - - | 39 | 16 | 23 |
| Department teachers | - - - - | 76 | 18 | 58 |
| Village principals | - - - - | 98 | 7 | 91 |
| Assistant principals | - - - - | 50 | | 50 |

The importance of training.—There is much value to real training in actual teaching even in preparing to be secondary teachers, a training which marks a graduate as a specialist in public-school work. The normal school requires this as a part of its assigned work and declines to accept an equivalent, therefore giving a technical education that has absolute value and strength in its serviceableness. Actual teaching under sympathetic yet expert and critical supervision gives a spirit, a mastery, and a status of broadminded effectiveness that are essentials in an educator. These are facts, not fancies; they are

truths, not fictions; and if these things are to be possible in universities or colleges they must become in these respects normal schools in reality, though they may be known by more exalted names.

CHARLES DeGARMO

Professor of the Science and Art of Education, Cornell University

A fundamental distinction between normal schools and universities in their relation to preparing secondary teachers.—The most obvious distinction between the normal school and the university as a training-ground for secondary teachers is that the normal school is obliged by its conditions, its primary aims, and its traditions, to devote its chief energies to the preparation of elementary teachers. Only in a large and general way can it devote more than a fraction of its attention to the training of teachers for secondary schools. The education department of the university, on the other hand, turns naturally to secondary education in its efforts to train teachers, for barely one in a hundred of its students expects to become a grade teacher. It is true that a number of young men expect ultimately to be superintendents, and thus desire familiarity with the problems and methods of elementary education. But even here, the demand is not so much for the details which the normal school emphasizes, as for the larger philosophical view that takes in the whole system of public education, and that furnish comparative estimates of the educational conditions, systems, and results of all civilized countries.

This fundamental difference of aim, arising from the fact that in the main the normal school prepares teachers for elementary, and the universities for secondary schools, is reflected throughout the two classes of institutions. A few of these differences will now be pointed out.

Comparison as to scholarship.—In scholarship the university student selects fewer studies and pursues them longer by more intensive methods than is practicable in the normal school; thus preparing himself more thoroughly for the departmental work of the high school. We must rid ourselves of the idea that difference means inferiority. It is simply difference. In the normal school scholarship is in the nature of the case more general, less intensive in character, and less exhaustive than in the university. This is no reproach, for the normal school necessarily looks at education from the standpoint of the pre-adolescent period and childhood. In my opinion, the

normal school and the university should not tend to approach nearer to common scope, intensity, method, and aim of scholarship, but on the contrary should tend still further to differentiate. The college ideal of scholarship, so longed for in some normal schools, is not the best ideal for these institutions, because the professional aim of the normal school is so different from that of the university.

Indirect professional training.— Closely related to the matter of scholarship is the indirect training in methods given in the two classes of institutions. The university student, concentrating his attention upon a few subjects for a long period of time and by more intensive methods, comes to have a more extended view of the teaching possibilities of his specialty than can the normal-school student, who has not specialized at all. In science, for instance, the man who has become an expert in handling all kinds of apparatus and performing every variety of experiment is better prepared for laboratory work in the high school than one to whom a science is an incident. The same is true of language, history, or economics. A library with a quarter of a million books is a better preparing place than one with five thousand. The rich collections of photographs, lantern slides, and illustrative materials are also important indirect aids to high-school teaching.

Direct professional training.— Coming to the matter of direct professional training, we find important differences, not always wholly in favor of the university as a place for training secondary teachers. The general theory of education can be adequately taught in the normal school, except perhaps for time limitations and the lack of extended study of contributory departments of knowledge. The best preparation for the theory of education is extended study in two directions; namely, the mental sciences, like logic, psychology, ethics, and the history of philosophy; and the social sciences like history, economics, and political science. The direct professional work in the university coming mostly in the junior and senior years, to say nothing of graduate students, offers, of course, a much better chance of such preparation than does the normal school, where such subjects can be but lightly touched, even if they are taught at all. Furthermore, the university naturally lays the chief stress in educational theory upon the adolescent period of mind, and the studies and methods of the secondary school. In this it differs essentially from the normal school whose heart is in another place.

History of education particularly considered.—A similar difference in emphasis is found in the history of education. Here the normal school naturally devotes the brief time it can spare for the subject to the unfolding of elementary education. This is right and proper. But the university has more time, and has perhaps more need of a philosophical and institutional view of the subject as a whole, and it certainly lays more stress on those aspects most important for secondary education. For example, instead of reading three pages of a text upon the Revival of Learning, it spends weeks in following out in detail the rise and development and extension of Humanism — its rise in Italy, its spread to Germany, and its bifurcation between Protestants and Catholics; its culmination in the gymnasial system of Germany; its æsthetic and scholastic influence in France; its dominating position in English secondary and higher education; and finally its importation to this country, together with its former commanding influence, its gradual decline in recent times, and its probable future importance. Similarly the rise and development of science in modern secondary and higher education, though covering a shorter period, is an equally important phase of the history of education in the university. For such study the normal school would lack both incentive and time.

Comparison as to training in practice-teaching.—The normal school has one facility in the training of teachers that the university must for the most part do without, and that is actual practice-teaching in a model or training school. The only successful system of secondary-school practice is found, not in schools for high-school teacher-training, for such nowhere exist except here and there in name, but in actual cadet teaching in the secondary schools themselves, as in Germany and in cities in connection with a few American universities. It seems as if experience has shown that nether high-school students nor their parents will permit practice-work by candidates for teaching except in the way indicated.

It is an open question how much good it would do a high-school teacher to practice teaching in elementary classes. This would depend upon the subject, the age of the pupils, and the character of the criticisms offered. The nearer the grade of instruction approaches that of the high school, the nearer will be the approximation of matter and method to the needs of the candidates for high-school teaching.

The question of degrees.—Is it advisable for normal schools to

extend their courses and grant degrees in education? If this means the adoption of a dual end, namely preparation of both elementary and secondary teachers, its advisability is extremely questionable. If all the students of a normal school are trained for both and may choose either, they will, for two reasons, generally seek high-school positions, because these positions pay better salaries and they furnish what is deemed, by the community at least, a better social standing. If the normal school comes to fulfil the functions of a university, by that fact it ceases to have an adequate reason for existence as a normal school.

If, however, the extension of the normal-school course means a better scholarship from the standpoint of elementary education, then such extension is theoretically desirable. More knowledge of subject-matter and more extended professional training without deviation of aim would certainly conduce to better results in school and community. But essentially to change the aim and spirit of an institution is to acknowledge that it is not justifiable as it is, but that it should become something else. Since, however, elementary education will become increasingly rather than less important, it is evident that we shall always need institutions whose whole mind and heart are devoted to this end.

C. C. VAN LIEW

President State Normal School, Chico, Calif.

The advantages which the universities possess over normal schools in the preparation of secondary teachers lie unquestionably in the more liberal general culture and training which it is possible for the university to provide. In the training of secondary teachers it should not be forgotten that liberal culture will always play a chief rôle. On the other hand the difficulty with the university at present is that it cannot supply to its candidates for the work of the teacher experience in teaching; and that it is too commonly hostile to both theoretical and practical training in the arts of the teacher. The strength of the normal school lies in the fact that it is equipped to inculcate good ideas and to train good habits of teaching. The whole career of the normal schools of this country has been making for experienced candidates for the teacher's office. The weakness of the normal school, especially in the matter of training secondary teachers, lies in its inability to supply large general culture. So far as secondary teachers are concerned, at least, it ought not to try it.

Where ability to exercise a practical art is concerned, degrees are, or should be, valueless. They should be restricted merely to the position of evidences of culture. For this reason normal schools should not grant degrees.

It is too easy in this country to become a secondary teacher. The problem of training secondary teachers will not be solved until we have some regulation approaching four years of university culture work, followed by two years of professional training. This professional training might well be undertaken in the normal schools, for in general they are equipped to furnish both theoretical foundations and teaching experience.

EDMUND J. JAMES
President University of Illinois

I am decidedly of the opinion that, aside from those fundamental qualities which the secondary teacher needs in common with all other teachers, the greatest need of the secondary teacher in the United States today is scholarship. He is ignorant of the subject he is teaching. In my opinion, no man can properly present a subject to pupils of high-school age who has not pursued the subject to such an extent as to have an independent judgment on the subject that he is teaching; in other words, not unless he has mastered the subject so far as to himself be capable of original production within the field. There are very few teachers of that grade in the United States today. No one who knows my record in this matter would suspect me of underestimating for a moment the value of strict professional training in the narrow sense of the word. I have stood for professional pedagogical training for secondary teachers in our colleges and universities now for more than twenty years, and I am more in favor of it today than ever before; but I have never thought for an instant that that was in any sense a substitute for scholarly training in the subject-matter which one is teaching; and I think of the two that the lack of knowledge is a far more serious difficulty today than lack of method, serious as the latter is.

JASPER N. WILKINSON
President Kansas State Normal School, Emporia, Kansas

Universities have an advantage in preparing secondary teachers, because their students cover more completely the academic work of secondary schools. I do not think the normal schools can afford to

content themselves with anything less in the methods of the secondary schools than what the university training gives in that line. I believe the normal schools can do better work than will the university in preparing students to teach well all the subjects taken by the teacher, even though the teacher trained in the normal school may not take more of a subject as a student than is taught by him.

It seems to me wise for the normal schools to grant some such degree as Bachelor of Pedagogy when the work done is equivalent to that done in the college for Bachelor of Arts or of Science. Those degrees should, I think, indicate a preparation to teach in the secondary schools.

M. V. O'SHEA

Professor of Education, University of Wisconsin

The well-nigh infinite variation in conditions, standards, and purposes makes the problem of training teachers most complex and difficult.—The more I see of teachers and teaching, the less confidence I have in anyone's power to say with precision or in great detail what abilities and qualities are essential to success in the classroom. Much less am I satisfied with most of the current theories regarding the origin and natural history of teaching insight and skill, for they do not seem to me to take full account of all the complex factors entering into the problem. *A priori* and analogical reasoning abounds in this field rather more liberally than elsewhere, I think; and prejudice plays a more important rôle than observation and experimentation. The man who is opposed, by the law of inertia mainly, to professional training maintains that the teacher is born, not made; while the professor of pedagogy gives the impression that no one can instruct successfully who has not completed a course in the history, theory, and practice of teaching. Both parties to the controversy often seem cocksure of their position. A well-nigh infinitely complex situation is treated as if all the evidence in the case was at hand, and could be taken in at a single glance. It is small wonder, considering the way this subject has been handled, that the college professor of physics, say, and the normal-school president so often hold diametrically opposite opinions respecting it.

Advantages of the university in respect of scholarship.—But with all the disparity between individual views, I still think that most persons who are giving this matter serious attention, are coming to see

that there are certain requirements which are absolutely fundamental to success in the schoolroom. The limitations as to space prevent me from doing more than naming these requirements, with the merest outline of argument. First of all must be placed knowledge—*concrete, vital, well-organized, extensively related, thoroughly digested knowledge of the subject to be taught*. Everything hangs on this. One cannot lead others where he has not gone himself, and familiarized himself with the country roundabout. I have seen teachers, seemingly well-schooled in method, performing such an apparently simple task as teaching third-grade pupils phonics and spelling. Their work was more or less of a failure from start to finish, mainly because they did not *know* the English language; they did not *know* the function of elementary sounds in verbal combinations; they could not readily show how a sound functioned in this word by comparing it with other words familiar to pupils and in which it functioned in the same way. If broad knowledge is so indispensable in relatively simple work like this, how much more necessary is it in the extremely complex work of the high school? A large part (not all, however,) of the poor teaching I have seen in the secondary school has been due to deficient understanding, in its full meaning and in all its bearings, of the subject under discussion.

Now, the advantage of university training, for high-school teachers at any rate, hinges upon this first requirement. The normal school as at present organized, with but very few exceptions, is not equipped to give pupils effective professional training for every grade of school work, and adequately supply their academic needs at the same time. When it attempts this herculean task its work becomes superficial and fruitless, and its pupils reach the dead line early. I realize, of course, that the broader opportunities of the university may not be utilized fully. The training may be verbal, scholastic, mechanical; but this is a matter of individual institutions and individual professors. And the criticism applies with equal force to the academic departments of many if not most of the normal schools. On the whole, physics or Latin or English is not taught in any more vital way in the latter than in the former institution. One who inspects high schools sees normal-trained teachers who are just as artificial and slavish and ineffective with their rhetoric or physiology or geometry as the most formal university-trained teacher could possibly be. Most of the non-professional subjects in the normal school

are handled by persons who are themselves strangers to the ideals and theories of the institution, and they often have little sympathy with professional training. Their visits to the professional department are infrequent, hastily made, and it happens that their work goes on utterly indifferent to the principles propounded in the psychology and method classes, and in the practice-school.

I may perhaps be allowed to go to the extent of saying that, speaking generally, the university secures the ablest men in the teaching profession, men with the clearest judgment as well as broadest learning, and my belief is that on the whole they make a sharp distinction between real and verbal knowledge of a subject. When one listens to these men discuss the teaching in the high school of their quondam pupils he realizes that, as a rule, the greater the man's learning in his field the more keenly he appreciates genuine and effective as contrasted with superficial and factitious work. The point I am making is that the academic training of high-school teachers may best be left to the university, which is alone qualified to undertake this work.

How the university can give instruction in knowledge of human nature at the high-school stage.—The second requirement for effective teaching is a subtle sense of the impulses and tendencies of human nature, and especially of developing human nature during the adolescent period. The teacher ought to understand, whether understanding comes from instinct or from learning, how the pupil will react upon school-room situations, in respect alike of matters of instruction and of government. Doubtless much of this understanding must be gained outside of the classroom, from original endowment, and by long and intimate contact in give-and-take relations with all sorts and conditions of boys and girls. An adult candidate for teaching, who has lived the life of a recluse, can probably never acquire a keen sense of human nature. But one who has had first-hand experience can be led to analyze it and see the principles exhibited in it. He can be led to observe directly how boys and girls react to typical situations, and thus he can supplement the review of his own experience. In this way he can be made to some extent aware of how the mind of the learner will most economically assimilate knowledge, so that he can consciously (at the outset) plan his own work in harmony with psychological law. He can be made to realize more or less clearly, too, how the social impulses of individuals can be organized and directed so as to most easily secure unity and sociality in the school group.

The university is well equipped to give the pupil a considerable part at any rate of this instruction. It offers in its own processes conditions much, though not precisely, like those found in the public high school. It comes as close to actual conditions probably as the average practice-school in the normal. University students have come so recently out of the high school, too, that their memories are fresh in reference to many of the most vital problems to be studied, and so, even without direct observation, the work may be made quite concrete and vital.

Limitations as to training through observation.—And yet, most universities are handicapped in not having under their jurisdiction schools of observation, such as are possessed by Columbia and Chicago. A considerable part of the work in educational psychology must be more or less in the air for want of opportunity to see the objects and events discussed. The experience of pupils cannot afford data to illustrate all the principles developed in the courses in Education, for this experience is usually too narrow; and, what is more serious, it is often of the wrong sort. Pupils brought up under military discipline will not understand all you say about self-government unless they can see it in operation. He who has been nourished on the classics during his high-school career will adjust himself with great difficulty to the newer views of relative values, unless you can set before him a lot of concrete evidence relating to the effect upon mind and conduct of a non-classical diet. And one might go on at much length in pointing out the benefits which could be derived from schools of observation in the university.

The question of practice-teaching.—The universities are handicapped again in not having schools of practice, though the limitations from this source are not so great and serious as they are sometimes represented. We do not seem to have made much progress in all our discussion the past ten years on the place and value of practice-work in training schools; but so far as I can tell those who favor *some* practice have the advantage in the controversy. But on the other hand, there is such a thing as having too much—so much that the novice habituates himself in the imitation of the peculiarities of his critic or model teacher, and ceases striving to work out effective methods in the light of principles of mental development. In my opinion, if you can give a high-school teacher insight into human nature as it is displayed under schoolroom conditions you have done about all you can for him. Of course, it is not easy to give such

insight unless the novice is put in situations where he must react in some way; where he must *use* his insight. It is a difficult, if not impossible, task to accumulate real, effective insight against some remote time of need. This is why we should have some practice, not so much for the purpose of acquiring skill as for enabling the student to gain genuine insight. The proper time to get facility in school-room technique is when the teacher begins his serious work. The superintendent and not the critic teacher should be responsible for this phase of the breaking-in of the novice. The professional work should aim mainly to develop *understanding*, giving the candidate only a start in the perfecting of technique, and leaving the most to be determined by the peculiar conditions under which he will work.

When I say *understanding* I refer, in the first place, to an intimate, fruitful acquaintance with the types of human nature presented in the average high school, and under schoolroom conditions; secondly, I refer to a knowledge of the influence in the life of a boy or girl of each and all of the branches of instruction; and lastly, I refer to an understanding of the psychology of the subject which the candidate is to teach—not of all subjects, but of his special subject. Note that I have said nothing of devices or of methods, but of the *psychology* of the subject. Methods not founded upon such psychology are bound to be employed in a formal, mechanical, ineffective way. Now, my point is that the university, with its present equipment, can go a good way toward giving this understanding, though it could do the work more completely and genuinely if it could have at hand a school under its own direction. University students, trained constantly as listeners, but not required to *do things*, are too self-contained when they start in teaching; they are not outward, not dynamic enough. They are more “ego-centric” than normal-school students, and to this extent are the less effective. Departments of education in the universities are in need of a more dynamistic atmosphere, if I may so express myself; but this comes only with practice-schools.

Universities more likely to send out secondary teachers of commanding personality.—I have already exceeded the space allotted me, but I cannot close without saying that, in my opinion, the thing that gives all knowledge and all understanding force and fruitfulness in the high school, or elsewhere for that matter, is *personality*, a term easy to use but hard to satisfactorily define. But we know what is

meant. Now, speaking generally, the university gets the strongest personalities in the commonwealths in which they are located. The most virile and competent men and women are always struggling topward in education as in other matters. It may be, and unfortunately it seems to be generally true, that the most capable men and women in the university do not choose teaching as their profession; but even so, those who do make such a choice are stronger on the whole, in all that this term means, than those who have stopped at some lower point. And this means, as pertaining to our special topic, that if we could we should place over boys and girls in the high school the type of man or woman who has climbed to the top of the educational ladder.

L. H. JONES

President Michigan State Normal College

Personal qualities, skill, and scholarship required in secondary teachers.—The teacher in the secondary school should in general be of a slightly more reflective cast of mind than the primary teacher and more disposed to generalize upon facts and emphasize conclusions than to end with the memorizing of separate items of knowledge.

There is required large sympathy with hopes, aspirations, and ideals, while the primary teacher is properly more content with a mastery of present tasks through present and temporary interests. The high-school teacher must, by nature or habit of mind, be able to open up for the young a ready comprehension of what constitutes success in life in its several provinces, or to show how scholarship in students is a general but very real preparation for successful living. To this end his scholarship must be more extensive as well as intensive in his specialty than is required for a smaller degree of success in primary- and grammar-school teaching. The intensive study of specialties should proceed to a point assuring a sufficient supply of subject-matter well digested and systematized to supply dynamic energy in the teaching act, and should stop short of the point at which interests are fixed and views narrowed to single provinces of thought or culture.

Special professional training.—As special professional training the teacher in the secondary school should have all the instruction in psychology which is necessary for the primary teacher, and besides, a

fuller study of the special phase of development peculiar to the age of adolescence. There should be also a much fuller study of the logical relations, topics, subtopics, and concepts of the subjects taught, and a more rigid comparison of this logical order with the psychological order in which these topics, subtopics, and concepts of a subject are most easily mastered by the adolescent mind; and especially a fuller study of such arrangement of these after they are learned by the pupils, as will make them best teach the generalizations which they are to suggest to the young.

There should be an especial study of ways or methods of teaching subjects so that they may be the means of creating beliefs, suggesting aspirations, developing interests, and establishing habits—any of which are of much greater importance than the mere learning of this knowledge as nonvitalized, disconnected, unrelated mental possession.

Universities in their relation to preparation of secondary teachers.—Neither universities nor normal schools have succeeded as yet in preparing properly the teacher for the secondary schools. There are certain well-marked defects in the university graduate, considered as a teacher in the secondary school.

1. As to subject-matter and methods he tries to have his secondary pupils do at once what his professors have had him do in his university course, ignoring the immaturity of his pupils. This tendency has grown worse and worse in recent years, as the tendency toward extreme specialization has grown more pronounced in the universities.

2. He tries to confine his students to minute study of small provinces of a subject, rather than to lead them toward larger views or more general conceptions. Hence he fails to make his instruction helpful to his pupils in shaping their beliefs, in stimulating their aspirations, or forming their ideals. I do not mean that he is too thorough in his teaching, but that he lays stress on small things to the exclusion of larger wholes which are more easily understood by the high-school pupil, and are more significant and helpful to him. He is exhaustive rather than thorough in his instruction. This evil is more disastrous to pupils who do not advance beyond the high school than it is for those who are preparing for college or university.

3. He comes to the high school bearing the university feeling that it is more important to teach subjects than pupils. This prevents his feeling responsibility for the advancement or welfare of the individual pupil under his care. Even the pedagogical departments of

our universities have not yet succeeded in fully correcting this wrong attitude of mind in their graduates.

4. His extreme specialization has left him without settled beliefs, general conceptions, or enthusiasm for good citizenship. He is therefore unfit to teach high-school pupils, who are in the formative period of character development, and many of whom will receive no further schooling. He corrects this defect only at the expense of those whom he teaches within the first two or three years of service.

Normal schools and the preparation of secondary teachers.—Normal schools have erred quite as greatly in their preparation of teachers in secondary schools, wherever they have tried to train such teachers, but in a different direction.

1. Normal schools have generally left their graduates with deficient scholarship. This results from admitting pupils with too little preparation, or allowing them to be graduated from courses that are not sufficiently extended and scholarly in character. Some of these institutions are now correcting these defective conditions.

2. They have frequently concerned themselves with the mechanics of teaching (oftentimes mere devices) under the title of methods, without giving attention to the larger significance of the school as an instrument of advancing civilization. There has been a marked improvement in the best institutions for the training of teachers, in this respect, within ten or fifteen years.

In one respect the normal graduate is a distinctively better teacher for ninth- and tenth-grade pupils than is the university graduate; namely, in his readiness to see and appreciate that the true end of teaching in a high school is such assimilation of knowledge by the pupil as to develop character, create efficiency, and direct conduct.

I am far from believing that normal schools should train all the teachers of the secondary schools; but I do believe that high-school instruction will be greatly improved in the near future by a larger proportion of teachers who shall have been trained in normal schools that are able through equipment and faculty to give them work fitted for their needs.

CHARLES B. GILBERT
New York

Universities are able to give students higher scholarship, a broader outlook, a more thorough and intimate acquaintance with subject-matter, and devotion to learning for its own sake. Their business is

to train specialists. Other things being equal, a student who thoroughly knows his subject and is devoted to it is better qualified to teach it than the one who has a less thorough knowledge.

University graduates, however, are apt to be deficient in a sense of relation, their own subject appearing to them of the greatest importance; in a knowledge of child-nature; in the power to adapt teaching to the immature, growing mind; and in the ability to distinguish immaturity from dulness. They are apt to present their subjects in the order of their logical development regardless of the psychological order or the order in which the students can receive and learn them. They are too frequently afflicted with a constriction of the imagination and with an unwholesome contempt for the study of child-nature and the principles of education.

Normal schools usually graduate their students quite deficient in the knowledge of any particular subjects; with a general view of the world of learning quite limited in extent; with a sense, sometimes exaggerated, of the importance of method; but with a sincere belief in the value of the study of child-nature and in the importance of consulting the results of such study to determine how subjects should be presented.

The normal-school graduate is more likely to pursue the psychological order than the logical in teaching, and so far as his learning is sufficient for his needs, is likely to teach his subjects better than a university graduate. But too frequently his learning is not sufficient. He is, indeed, in danger of despising real scholarship and of assuming that teaching is a distinct art and can get along without it.

Naturally, a combination of the good points of both university and normal-school training, with the omission of their bad ones, would be desirable. Under present circumstances, such a combination can be brought about better by the university than by the normal school, inasmuch as it has a better equipment and is able to require a higher standard of admission and to furnish the essential scholarship.

The ideal place for the training of secondary teachers is a teachers' college of some sort attached to a university as a co-ordinate part, utilizing all of the scholarly advantages of the university and adding the special training needed to make teachers. Such schools, however, need to have one feature greatly strengthened. None, so far as I know, with the possible exception of that at Brown University, have adequate facilities for practice by intending teachers; and

such practice as is furnished is usually under conditions such as never will be found to prevail in the schools in which the students will teach. An ideal arrangement would be a close relation between the teachers' college and the local high-school system.

It does not seem desirable at present for the ordinary normal school to add to its course and give degrees in education. The normal schools are not now able to even approximately supply teachers for the elementary schools for which they are especially intended, and to divert any portion of the money belonging to them to a lengthened course for the sake of training teachers for high schools would result in thinning the work all along the line. There are practically none of them equipped for doing such scholarly work as is required for the training of secondary teachers and unless the states are willing to enormously increase the appropriations, they cannot do this high grade of work, which necessarily requires the expenditure of large funds. It is much more important that for the present at least all efforts for the extension of normal-school facilities be directed to increasing their number and making them more efficient for the supply of the needs of the elementary school, and those who are especially interested in the development of the training of secondary teachers should use all their efforts for the strengthening of the departments of the universities according to lines indicated above.

BIBLIOGRAPHY

For the convenience of readers the following brief bibliography is inserted. It is grouped under the several divisions of the study presented in the *Year-book* according as it has a primary bearing upon one or another of these divisions.

I

- BISHOP, J. REMSEN. "The Function of the High School of Today." *Proc. N. E. A.* [1901], pp. 570-76.
- BROOKS, STRATTON D. "The Function of the High School of Today." *Proc. N. E. A.* [1901], pp. 576-78.
- BROWN, ELMER E. *The Making of Our Middle Schools, Passim*. (This is the best single book on the historical aspect.)
- BROWN, J. STANLEY. "In What Respects Should the High School be Modified to Meet Twentieth Century Demands?" *Proc. N. E. A.* [1904], pp. 491-95.
- BUCK, B. F. (Same topic.) *Proc. N. E. A.* [1904], pp. 496-502.
- BUTLER, N. M. "The Function of the Secondary School," *The Meaning of Education*, pp. 151-83.
- DEXTER, EDWIN G. *History of Education in the United States*, pp. 170-81.
- FROULA, V. K. (Editor) *Report of National Conference on Secondary Education, Passim*.
- HADLEY, A. T. "The Meaning and Purpose of Secondary Education." *School Review*, Vol. X, pp. 729-41.
- HANUS, PAUL H. See especially "Secondary Education as a Unifying Force in American Life," in his *Educational Aims and Educational Values*, pp. 113-38.
- A Modern School*, pp. 43-67.
- Symposium on relation of the high school to the life of the people. *Proc. N. E. A.* [1897], pp. 694-99.
- WOODWARD, C. M. "The Opportunity and Function of the Secondary School." *Proc. N. E. A.* [1903], pp. 60-65.

II

- HANUS, PAUL H. "The Preparation of the High-School Teacher of Mathematics." *School Review*, Vol. V, pp. 504-18.
- HARRIS, W. T. In *Educational Review*, Vol. XVII, pp. 11, 12.
- HARTWELL, S. O. "The Equipment of the High-School Principal." *School Review*, Vol. IX, p. 160.

- HARTWELL, HERBERT W. "A National Standard of Higher Education." *Atlantic Monthly*, Vol. XC, pp. 329-35.
- HULING, RAY GREENE. "The Problem of Service," *Education*, Vol. XXI, pp. 129-33.
- JACOBS, WALTER B. "The Characteristics of an Efficient Secondary Teacher." *School Review*, Vol. XII, pp. 706-15.
- KNIGHT, GEORGE W. "What the Teacher of American History Should Be and Do." *School Review*, Vol. X, pp. 208-16.
- LEONARD, ALBERT. Editorials on the high-school teacher's training. *Journal of Pedagogy*, Vol. XI, pp. 258-61; Vol. XII, pp. 3-8.
- RUSSELL, J. E. "The Training of Teachers for Secondary Schools." *Proc. N. E. A.* [1899], pp. 285-96; [1901], pp. 636-41; *Educational Review*, Vol. XVII, pp. 364-79.
- THURBER, SAMUEL. "An Address to High-School Assistants." *Education*, Vol. XXI, pp. 81-91.

III

- HINSDALE, DE GARMO and E. E. BROWN. "The Certification of College and University Graduates as Teachers in the Public Schools." *School Review*, Vol. VII, pp. 331-71.
- LOCKE, GEORGE H. (Editorial.) "The New Requirement and Plan of Certification of Secondary Teachers in California." *School Review*, Vol. IX, pp. 193-95.
- Reports of the United States Commissioner of Education.*

IV and V

- BISHOP, W. W. "Preparation for Teaching in Secondary Schools." *Educational Review*, Vol. XIX, pp. 175-86.
- BUCHNER, E. F. "The Function of Departments of Education in Southern Universities." Pamphlet.
- BURNHAM, W. H. "Education as a University Subject." *Educational Review*, Vol. XXVI, pp. 236-45.
- CLARK, W. A. "Training of Teachers for Secondary Schools." *Journal of Pedagogy*, Vol. XVI, pp. 124-35.
- HALL, G. STANLEY. See index to his *Adolescence*.
- HANUS, PAUL H. *A Modern School*, pp. 244-47, 251-84.
- HINSDALE, B. A. "The Study of Education in American Colleges and Universities." *Educational Review*, Vol. XIX, pp. 105-20.
- (See also his *Studies in American Education*.)
- JACOBS, W. B. "The Training of Teachers for Secondary Schools." *School Review*, Vol. V, pp. 375-86.
- KINNAMAN, A. J. "Pedagogy in Our Colleges and Universities." *Pedagogical Seminary*, Vol. IX, pp. 366-73.

- LEWIS, F. C. "The Professional Training of College-Bred Teachers." *Educational Review*, Vol. XXVII, pp. 433-42.
- LOCKE, GEORGE H. "The Training of Teachers for Secondary Schools." *Proc. N. E. A.* [1901], pp. 641-43.
- LUCKEY, G. W. A. *The Professional Training of Secondary Teachers in the United States*. (Especially Chapters IV, V, and VI. This is by far the most complete and serviceable reference on the subject.)
- MANCHESTER, O. L. "Are We [Normal Schools] Justified in Attempting to Prepare Teachers for the High School?" *The Vidette*, Feb. 1901, pp. 1-6.
- "College Graduates and Teachers." (Editorial.) *The Nation*, Vol. LXIX, pp. 202, 203.
- O'SHEA, M. V. "The Function of the University in the Training of Secondary Teachers." *School Review*, Vol. VIII, pp. 157-70.
- "Concerning High-School Teachers," *School Review*, Vol. X, pp. 778-95.

REFERENCES FOR COMPARATIVE STUDY

- BOLTON, FREDERICK E. In *The Secondary School System of Germany*, pp. 55-128.
- CUNNINGHAM, WILLIAM. "The Training of Teachers at Cambridge University." *Educational Review*, Vol. XVII, pp. 450-55.
- LUCKEY, G. W. A. In *The Professional Training of Secondary Teachers in the United States*, pp. 30-50.
- RUSSELL, J. E. In "German Higher Schools." Esp. pp. 352-69. *Educational Review*, Vol. XVII, pp. 17-33.
- "The Status of Professional Training of Secondary Teachers in France." *Education*, Vol. XXII, pp. 652-54.
- "The Training of Secondary Teachers at Oxford." *Educational Review*, Vol. XXVIII, pp. 518-22.

COLLECTED BIBLIOGRAPHY

- BOLTON, F. E. *The Secondary School System of Germany*, pp. 385-90.
- BROWN, ELMER E. *The Making of Our Middle Schools*, pp. 480-518.
- LUCKEY, G. W. A. *Training of Secondary Teachers*, pp. 258-61.
- The *Educational Review*, *Pedagogical Seminary*, *School Review*, and the *Reports of the Commissioner of Education* keep educational bibliography up to date.

MINUTES OF MEETINGS HELD AT ST. LOUIS, MO.,
JUNE 27 and 28, 1904

(ROOM I, HALL OF CONGRESSES, LOUISIANA PURCHASE EXPOSITION)

In a conference of the Executive Committee just before this meeting it was decided that the next topic for study should be "The Education and Training of Secondary Teachers." This was in accordance with the dominant preference expressed by members of the Society. Time did not allow a consideration of other items of business.

The meeting was called to order by the President, Wilbur S. Jackman, who briefly introduced the subject of nature-study, and asked for a frank and critical discussion of his views on the subject as presented in the *Third Yearbook*, Part II.

Although the *Yearbook* had been in the hands of members but two weeks, the discussion showed a more careful study of it than usual.

Professor George M. Forbes, of Rochester University, C. P. Cary, State Superintendent of Wisconsin, Herman T. Lukens, and Theodore B. Noss, of Pennsylvania, L. E. Wolfe, of Texas, Grant Karr, of New York, Jesse D. Burks, of New Jersey, and a few others took part in the discussion. (For members of the National Society and other readers of the *Yearbook*, two of the discussions are printed. It is now the policy to print some of the discussions that will be of interest and value to members and others. Discussions ought to clear up more than they usually do, and the man who will promote the art of scientific criticism in discussion will be an educational benefactor.)

By motion the Executive Committee was instructed to fix the meeting for Tuesday, June 28, at a more suitable hour and place. This question was considered by the Committee but no hour and place more generally convenient could be found. Notice was so given.

Ordered by motion that phases of the paper not touched upon thus far, especially (1) the moral value of nature-study, and (2) the course of study outlined by Dr. Jackman be special orders for the Tuesday meeting.

Rain and mud and the many counter attractions left the attendance smaller than was expected. About forty were present.

MINUTES FOR MEETING TUESDAY, JUNE 28

A round-table discussion was held for two hours on Tuesday afternoon, following the lines ordered the day before.

The following persons were elected to active membership:

Frederic E. Farrington, Assistant Professor of Education, University of California, Berkeley, Calif.

Maximilian P. E. Groszmann, The Groszmann School for Nervous and Atypical Children, Plainfield, N. J.

David S. Snedden, Assistant Professor of Education, Leland Stanford Junior University, Stanford University, Calif.

DISCUSSION OF DR. JACKMAN'S PAPER ON NATURE STUDY

GEORGE M. FORBES
University of Rochester

MR. CHAIRMAN:

I have read the monograph of Professor Jackman with keen interest and wish to express my admiration and appreciation of this comprehensive attempt to define the scope, the correlations, and the purpose of nature-study in elementary education. Its value is by no means confined to the positive contribution which it makes to the educational evaluation of the study. It is scarcely less valuable as a stimulus to thought and experiment, and as a point of departure for organizing and defining both theory and practice regarding this subject, now so vague and undefined in the minds of most teachers.

In suggesting some questions which have occurred to me regarding the views set forth by Professor Jackman, I shall leave the minor points with mere mention and take the few minutes allowed me in discussing the main contention, that upon which he stakes the whole value of the study; viz., that the supreme end of the study is to develop moral character.

What constitutes a mental image.—Among the minor points I would mention Professor Jackman's use of the word "image," and his exposition of what is involved in the formation of an image (page 18 seq.). The illustration used by Professor Jackman would seem to indicate that all generalization through the discovery of resemblance, and all organization of facts through the discovery of causal relations are included in the process of forming an image. Here the conceptual and perceptual process and products seem to be completely confused and the most abstract product of generalization is designated as an "image."

Individual vs. type.—Another point is Professor Jackman's advocacy of the study of individuals and individual characteristics rather than of type (Chap. III). The position taken in this chapter seems somewhat inconsistent with that on page 11, where the author discusses "the unity of nature-study and natural science." The interest which children feel in the study of individual characteristics is rather a sympathetic and æsthetic interest than a scientific one. It seems the very essence of scientific interest that it seeks the type and the law. It is an exaggerated individualism, a projection of human life into nature, that gives all the charm to such books as Seton Thompson's; and such books are obviously very remote from the scientific in their spirit.

In Chap. III Professor Jackman recognizes that a child's interest must

be in the individual, and thus indicates the natural dividing line between the earlier and the later and more strictly scientific study of nature. It is a question whether a genuinely scientific interest, i. e., an interest in the abstract process of generalization which leads to type and law comes earlier in the average child than the period of adolescence, and so whether in the presentation of form, color, motion and life in nature to young children any attempt should be made to appeal to other than sympathetic and æsthetic interests. Sympathy with nature and enjoyment of it seem the natural ends, the ends prescribed by the nature of the child.

To comprehend and to enjoy nature as the poet comprehends it and enjoys it; to find spirit in nature and beauty, and thus to make nature a means of companionship and pure enjoyment—these are ends of nature-study which should never be overlooked. The great question is whether the analytic and abstract view of science, which dissects nature and dissolves its individuality into the shadows of type and law, is not positively hostile to the other point of view.

Whether nature as means of culture and nature as means of scientific training are not essentially different studies. I do not assume to answer this question. I only raise it.

Number work and nature-study.—Still another point is the author's view of the relation of number work to nature-study (Chap. V). The author's argument against drill work in number seems to rest upon the assumption that, if you dissociate the numerical symbol from particular concrete objects, you divest it of all meaning for the child. This cannot be admitted. One might as well say that when you dissociate the word-symbol from some particular object, you divest it of all meaning. The child cannot read, in any proper sense of the term, until it is able to take the meaning direct from the symbol; i. e., until the meaning of the symbol is an idea, not a particular thing; so the child cannot calculate in any adequate way until it takes the meaning of the number direct from the symbol without immediate reference to a particular object or group; and it is not too much to say that it is, and should be, the great aim of the teacher to secure this power of abstraction and thus emancipate the mind of the child from sense-perceptual bondage. The modern advance in the teaching of number is marked, not by omitting the training necessary to deal with number in the abstract, but by insisting upon an adequate concrete basis for such abstraction. It insists that number shall begin with the concrete particular in order to give precise and definite meaning to the symbols, but not that it shall end with it. The quantitative treatment of nature may contribute greatly to the mastery of the science of number, but its contribution would be of doubtful value on the whole if it discredited the drill which develops power to grasp the universal in number apart from this or that concrete application.

Nature-study and morality.—The discussion which Professor Jackman regards as fundamental, because it determines the value of all the rest, is that regarding the relation of nature-study to morals (Chap. VI). Any adequate treatment of the author's view of this relation would require far more time than can be allotted to this discussion. I can only point out in the most summary way some grounds of dissent from the position taken. This position seems to be based upon two conceptions: first, that science has somehow established a new foundation for morality; and second, that the essence of morality is in that "concession," or "adaptation," which is exhibited throughout nature.

In regard to the first it may well be questioned how a study which concerns itself wholly with impersonal law, which deals exclusively with the category of a rigid causal sequence, can establish any foundation for a science the very corner-stone of which is the presupposition of freedom, and choice. The serious question is whether there is any morality in nature as such, whether all the morality which we may think we find there is not the imaginative projection of personal life into the life of nature, the product of the sympathetic and poetic view of nature, and so rightly rejected by the scientist as from his point of view an unwarranted importation of teleology and sympathy, where he finds only rigid causality. I doubt if there can ever be any clear thinking regarding morality so long as one fails to see that the abstract category of cause, as science conceives it, is simply the negation, not the foundation, of morality. To suppose that morality can be illumined or explained by being referred to this category is to suppose that you can explain the higher by the lower, the concrete by the abstract.

Regarding the second conception, that the essence of morality consists in adaptation, it may be questioned whether the vagueness and ambiguity of the term does not make it worthless for the purpose of defining morality. The author's illustrations would seem to indicate this fundamental ambiguity. If the organic reactions to environment in grass and trees are identical with the act of proffering a cup of cold water, then it is doubtful whether a valid distinction can be made anywhere. We cannot stop at the trees and the grass but must include the formation of the crystal and the chemical reaction in our idea of adaptation and concession; on the other hand it is difficult to see why the utterance of a falsehood, and the act of theft are not as much adaptations to environment as the proffering of the cup of cold water. It would be interesting to inquire how the author interprets the struggle for existence in organic nature. Does not the fittest, i. e., the strongest, survive; and must not the weakest go to the wall; and is not this process also one of "adaptation" and "concession" to the pressure of surroundings?

For these reasons we cannot share the author's hopes of a renovated morality through the scientific study of nature. Morality grows out of the

relation of man to man, its great exemplifications must always be in human life, and from this field too must the youth draw his great inspiration to duty. All the morality in nature is read into it by sympathetic and imaginative interpretation, but this is the very interpretation which science cannot accept. Science does, it is true, make indirectly great contributions to morality, but it is not by finding morality in nature. It is rather in developing the sense of reality and the disinterested love of truth, and this may be transferred to human life and result in a love of truthfulness and a hatred of all shams.

The scientific study of nature must, it would seem, be content with this indirect contribution to morals, and rest its right to recognition, not upon a claim to be the foundation and source of all true morality, but upon the other well-known advantages of scientific study.

COMMENTS UPON PROFESSOR FORBES' REMARKS BY THE AUTHOR OF
THE YEARBOOK

There is no discipline equal to that which comes from having one's ideas overhauled in a frank and open discussion. What is taken as a difference of ideas, however, often turns out to be but a difference in the use of terms to express practically the same ideas; or as in this case, perhaps, the writer of the *Yearbook* did not make himself sufficiently clear to be easily understood. These two suggestions will account, I am sure, for most of the exceptions raised by Professor Forbes, but not for all.

It would prolong the discussion beyond reasonable limits to fully consider the point raised about number work. In a word, I insist that much work that passes for number work is language lessons pure and simple wherein words and symbols are used that mean nothing; that a child has the same right to have a mental picture back of a number used that he has to have a mental picture back of any word used. This does not imply the perpetual presence of the object in number work any more than it implies that a mountain must be present always when the pupil reads about it. "Number in the abstract" is a phrase responsible for much confusion. It would be interesting to know what Professor Forbes means by it.

The far more important point relates to the bearing of nature-study upon morals. The point of view adopted by Professor Forbes is radically different from that taken in the paper. The corner-stone of his ethical doctrine seems to be "the presupposition of freedom and choice." This, the paper neither assumes nor allows. There is no morality among the trees — no trace discernible. There is a little trace of the beginnings of it among the beasts — in the care of their young, for example. Morality among human beings is but that extension of these primitive and parental relations so as to cover a wider field of activities which the higher organized brain of man has enabled him to

make. In the struggle for existence there is nothing incompatible with the highest ethical code. With man, the struggle is for the *highest existence*; with the brutes for a lower—at least according to human standards. The struggle for existence on the lower or brute plane involves the destruction of the weak and helpless; on the higher or human level it involves their nurture and care; otherwise our existence is not worth having. This is in accord with the law of love which is as absolute and irrevocable as the law of gravitation. As the unfolding of the leaf is a concession to the sunshine, so the unfoldings of mercy are concessions of the human being toward those that need help. The trees and beasts adapt themselves to each other on the basis of physical strength; on the human plane adaptations take place on higher grounds. Instead of killing the weak or crowding them to the wall, we succor them—that is the highest adaptation.

The utterance of a falsehood and theft, as Professor Forbes suggests, are indeed adaptations to environment. The race—some of it—has found out that the proffering of a cup of cold water is also an adaptation and that it is of a much higher type, and hence moralists are uniform in their advocacy of it. In the long run—ages long—it is the faith of the optimist that this type of adaptation will finally prevail and that through it the race will be lifted to heights which are, as yet, undreamed of.

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I am in hearty accord with what I understand to be Professor Jackman's standpoint in the teaching of arithmetic. Nature-study needs the assistance of number work to make its images exact and definite. Arithmetic needs to do such work in order to gain motive and sanity in its study. The co-operation of the two subjects is mutually helpful and neither can afford to do without the other. The arithmetic is still one of the worst-taught subjects in the curriculum, because of the disconnected character of the problems. What should be capable of implanting and nourishing deeply moral feelings of honesty, integrity, justice, order, and faith in God, serves often to teach cunning, guessing, cheating, profit and loss, and speculation, in which the pupil, however, is often blissfully unconscious of his errors when he dots his decimal point down in the wrong place.

The question of teaching arithmetic *incidentally* and omitting drills on arithmetical processes has absolutely nothing to do with the paper before us. No such proposal is made in the paper nor would it be practicable if it were made.

The geography is in the same relation to the arithmetic as is the nature-study—needing the exact precision of measurement for its images of area, population, distance, industries, products, and commerce; and, on the other hand, furnishing the real problems that set the pupil in the right attitude of interest toward his number conceptions.

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THE FOURTH YEARBOOK

OF THE

NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

PART II

THE PLACE OF VOCATIONAL SUBJECTS IN THE HIGH SCHOOL CURRICULUM

THE PAPERS FOR THE DISCUSSION OF THE PAPERS IN THIS YEARBOOK WILL BE
READ AT 10:00 A. M., MONDAY, JULY 1, AND AT 1:00 P. M., WEDNESDAY,
JULY 3, 1906, ASBURY PARK, N. J.

THE NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION
(PUBLISHED BY THE NATIONAL EDUCATIONAL ASSOCIATION)



THE FOURTH YEARBOOK

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NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

PART II

THE PLACE OF VOCATIONAL SUBJECTS IN THE HIGH-SCHOOL CURRICULUM

BY

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Massachusetts Institute of Technology

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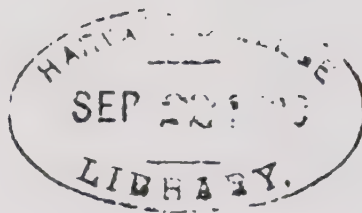
MANFRED J. HOLMES
SECRETARY OF THE SOCIETY

MEETINGS FOR THE DISCUSSION OF THIS YEARBOOK WILL BE HELD AT 4:00 P. M.
ON MONDAY AND WEDNESDAY, JULY 3 AND 5, 1905
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ANNOUNCEMENT TO ACTIVE MEMBERS

There has been a general opinion among the members of the Society that our meetings would be more effective without the presence of a miscellaneous audience. This opinion has grown into a positive determination to take measures that will avoid such a crowd. There are several things that will contribute to bringing about this highly desirable end. (1) The selection of a room for meeting. The room should be as convenient as possible for members, but not such as will make it easy for anybody to drop in out of mere curiosity. (2) Admission to the meetings should be by personal identification or by certificate of membership. (3) It ought to be better understood and accepted that those eligible to enter the meetings are (a) members—both active and associate, and (b) guests—both those invited by the officers as guests of the Society and those invited by active members as personal guests.

The general and positive demand that a more definite program be planned for each meeting will be complied with; but nothing will be done to take away entire freedom and ample opportunity for any member to take part in discussion; and no policy will be adopted that will relieve members from responsibility of preparing for the meeting by at least reading the *Yearbook*.

The opinion is none the less general and positive that there be laid before the Society a definite topic or series of topics for consideration, and that the chairman enforce strict adherence to a topic until the next one is due.

The time has not yet come when we can decide on time limits for discussion in advance of a meeting. But experience has proved that both prudence and justice occasionally require a limit to the number of times a member may speak, and to the length of his remarks.

Non-members should not be granted the floor unless invited. At one meeting a man who neither understood nor sympathized with the work of the Society delivered a five-minute criticism telling what the Society ought and ought not to do. Any ruling in accordance with this suggestion should receive hearty support from all members.

Unless otherwise announced in the final Official Program-Bulletin of the National Educational Association, the meetings at Asbury Park will be held in the First Presbyterian Church.

It is hoped that a large number of active members will be present at the Asbury Park meetings prepared to question or discuss some definite aspect of the great educational problem which the present *Yearbook* brings before the Society.

At the Wednesday meeting some time will be given to a consideration of the welfare, policy, and future work of the Society. The suggestions under the Secretary's report will then be acted upon.

It is urged that wherever possible members form local circles for the reading and discussion of the *Yearbook*.

The Coleman House will be the Society's headquarters.

M. J. HOLMES, *Secretary*.

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INTRODUCTION

Whatever may be said about school as life itself, it is nevertheless a fundamental and persistent fact that school is also and primarily a preparation for life. History is ever proving the truth of this statement, offering clear evidence at three stages in the evolution of a school: first, at its origin; second, during the period of efficient function; third, in its decline. Every school is called into existence to help children and others to better discharge life's relations and realize life's ideals. As long as it meets the demands upon it, it continues to exist. Its continued survival depends upon its ability to readjust itself to render new service demanded by change in ideals and needs. When it no longer has within itself the principle of accommodation it declines and takes its place among the historic fossils or buried relics of a past age.

Whenever a school or a course of study ceases its *vital* functioning there is evidence that it is not in touch with the great source of life that created it. It must regain the contact of vital service or fall behind the procession of progress, nursing its gone-time ideals with a devotion all unconscious of the pathetic though may be picturesque figure it cuts.

The Executive Committee of the National Society for the Scientific Study of Education decided to bring before the Society one of the most significant aspects or trends of American education to-day. The view is not complete; but even as it is perhaps more is presented than can be covered in discussion at the Asbury Park meetings. Perhaps logical completeness in the general plan may seem to be lacking because there is no chapter on the general function of the public high school, and none on the educational value of the vocational subjects in the high-school course of study to show their necessity in a high

school that is rendering its complete public service. But Professor Dexter has assured the probable presence of President E. J. James, University of Illinois, to discuss these omitted features of the study at Asbury Park.

Under the general topic "The Place of Vocational Subjects in the High School Curriculum," the three great groups of what may be called vocational studies have been treated by persons well qualified to represent their respective aspects of the problem. It should be distinctly understood, however, that opinions of individual writers do not necessarily represent the opinion or meet the sanction of the Society.

In addition to the main feature of this *Yearbook*, a consideration of the problem of training secondary teachers has been carried on in two strong discussions.

A special feature of this book is the Secretary's report on the conditions, needs, and prospects of the Society. I must hope that this will be examined by all members who are sincerely interested in the welfare of the Society.

M. J. H.

THE FOURTH YEARBOOK

THE PLACE OF COMMERCIAL WORK IN THE HIGH-SCHOOL COURSE OF STUDY

J. STANLEY BROWN

Township High School, Joliet, Ill.

SYNOPSIS

The chief factor in determining the high-school course—public opinion; the teacher's function and duty in this connection; the action of public opinion illustrated.

How private schools exercise a corrective and progressive influence upon the courses in public schools.

The evolution of the idea of commercial courses; the old idea—cheap, short cuts; the new idea—a liberal education, time to develop.

The conception of "culture" determined by the ideals of the age; influence of the civic-commercial ideal.

The demand for commercial education of a high order coming to be reflected in the courses of most kinds of schools.

Education ought to be a unit; hence the unwisdom of creating separate schools for vocational courses. Almost every course reaches out into other courses and finds its complement in them; so with commercial courses.

Great stimulus would be given this work if colleges should recognize that it stands for just as much training as any other kind of work.

The probable growth of commercial work in extent and relative importance.

The importance of taking the commercial work in the order laid down in the course of study.

Who should be advised to pursue a commercial course in the high school?

What a four-year commercial course should contain.

The commercial course in the Township High School of Joliet, Ill.

The most important factor in determining what work shall be offered in a course of study for any secondary school is public demand, or public opinion. Teachers themselves perform a very important and highly valuable function by creating and shaping public opinion, and he who, for fear of doing something which will not meet immediate public approval, refrains from doing what he can to shape public opinion along progres-

sive educational lines, will soon find himself relegated to the "side lines" and no longer a real "part of the game." Public opinion precedes public demand, and sometimes the procedure is so rapid that the one almost antedates the other.

An examination of the records shows that in the great city of Chicago there was no demand for a public high school with any kind of course of study until about fifty years ago; while to-day public opinion will not suffer the number to decrease, but the number of schools, their equipment, their conveniences, etc., must ever go on to something greater and better.

If we will pause a moment to reckon with our school history, or rather, with the subject-matter of our course of study, and indeed the courses themselves, we find that among the earliest course of study public opinion directed that Greek, Latin, and mathematics should form almost the entire curriculum; and so rigid was this belief that one course only was open to all alike, regardless of previous condition or future career. The college took practically the same view and continued this same kind of work.

If anyone had suggested the propriety of offering a course in some kind of laboratory science such as may be found in any good high school to-day, he would have been branded as a rank species of heretic, unfit to breathe the scholastic atmosphere of that period.

By virtue of the fact that private secondary schools are not supported by public taxation, but seek to promote their welfare by some other means, there has been and is even now great effort put forth to call public attention to any new features in work or equipment not found in public high schools. It is for this reason more than any other that all subjects mentioned in school curricula to-day, especially music, drawing, manual training, commercial work, domestic science, and others outside of the three which almost entirely made up the earliest course of study have found their way into the course of study through the private institutions.

This fact means that cheap, short cuts, and that, too, for

revenue only, characterized the initial efforts in commercial education. Because of the narrowness of the earlier attempts at business education, a few courses only were offered, and these for a brief period; but this small beginning, ridiculed at first, as something foreign to any kind of culture, has been given such recognition now that a large per cent of the high schools of this country realize that this phase of education has come to stay, and have therefore established some kind of course of study.

In many places the experimental stage has not been passed, and the teacher in charge of the commercial work is simply tolerated by other departments and is looked upon as a questionable factor; but the evolution of this phase of education is going steadily on, and is proceeding much more rapidly than some of the other phases before mentioned. The immediate popularity attending the introduction of such work is never desirable, because the reaction is sure to come. The recalcitrant is an ever present trouble. The conservative pace in development is much to be preferred. The position once gained ought not to be given up.

The commercial course in any school ought to require the same effort to complete it as any other course requires. This course of study and the students pursuing it ought to have the same scholastic respect as any other company of students pursuing any other course. This course must stand for just as much training, just as much glory in its completion as any other course. The teacher in charge of this department, and the head of the school must, in large measure, be held responsible for the scholastic status of this work. After it has secured a fair recognition at the hands of all students and teachers, it will lose or gain prestige in the same way as any other department.

The timidity which characterized the introduction of this work in many places was not likely to create an air of respectability. In many high schools, in which all regular courses were four years in length, their new business course was two

years, and was modeled strictly after that in the private business school. This was a grievous mistake, because the course was at once branded as cheap, easy and fit only for such students as were mentally unable to succeed with the Latin or scientific course. It was at this stage that students looked upon the commercial course as they once did the English course; and if asked how many studies they were pursuing, they replied, "Three studies and English," meaning that English was of such little significance that, in point of difficulty it was not regarded as other studies. It was so with commercial work until the course was properly graded and arranged somewhat after the manner of other courses in school. Now wherever a good commercial course is found, its completion means that as much has been accomplished in educational value as in the completion of any other course.

Commercialism was never more intense, nor the life of a business man more strenuous than in this day and age. The demands of the age must always have consideration in the making of school curricula, and so we believe there is more reason now for magnifying and developing commercial work in the high school than there has ever been heretofore.

The old idea of culture and that alone was good, and it is good yet, but it was not, and is not all by any means. A judicious fusion of these two notions, the old and the new, and a rational application of the resultant will produce a far more satisfactory product than has yet been found in paying quantities in this country. A man may be cultured and yet keep a set of books. A graduate from the old classical course in college will make all the better teacher of stenography, typewriting, business arithmetic, etc., for having had his classical training; and he ought not to find the atmosphere any less inviting and invigorating in the second condition than it was in the first condition. George B. Cortelyou, William Loeb, and Helen Gould certainly show that culture and business training are not incompatible. We are living in an age which honors independence in the individual, and neither wealth, position, culture nor

any other qualification can take its place. The world wants workers, men and women who can take the initiative in bringing things to pass, and it is willing to pay for such service; and so the need of a broader, more careful, more helpful business training at public expense is manifest.

This public need is making itself known more and more broadly, because we find that within a few years, normal schools, colleges possessing the power to confer degrees, private academies, seminaries, etc., have introduced some kind of commercial course, and in order to meet still further this demand, four or five universities and colleges of the higher order have made what they term courses in higher commercial education.

The competition among these various institutions, conducted mainly for revenue, acts as a great sharpener and has resulted in larger courses, better teaching, better salaries for the teacher and a better product to assist in doing the country's business.

The standard of secondary commercial work has been raised greatly within the past ten years, and now in many places the commercial course is made the equal of any other course.

In my opinion it is a mistake to organize separate schools for manual training or commercial work. Education ought to be a unit. There is no more need for differentiating these subjects and forming separate schools with separate faculties, than there is for forming separate high schools for studying all kinds of foreign languages, or all kinds of mathematics and science. Commercial work, manual training, domestic science, etc., are simply phases of education, and ought to be taught in all high schools if they are taught in any. In great cities or in small cities the opportunity to take a course in manual training, commercial branches, foreign language, science, mathematics, etc., ought to be equal. But it can not be so if manual training or commercial work, etc., are put into one school building only. Segregation of subjects in secondary education is even worse than segregation of students. Almost the whole country has

announced its verdict on the latter, and it waits only a good opportunity to record its protest against the former. Congregation of teachers and subjects, not isolation, ought to be our watchword.

Manual training has been recognized, and yet in a comprehensive sense stenography, typewriting, mechanical drawing, penmanship, etc., belong to manual training and ought so to be recognized. It ought not to militate against civics, industrial history, economics, or Spanish that they happen to be placed in the commercial course.

Among the greatest stimuli which have contributed to better secondary school work, more time given to such work and to the character of the teaching in the secondary school, stands the custom of colleges in forming with the schools an accredited relationship. State inspectors of high schools everywhere testify that their work tends to rapid improvement of poor schools and to greater uniformity among the better schools. Now the business courses are so new that little, if any, recognition has been given to his work toward fulfilling college-entrance requirements. No greater stimulus could be given this work than to have the colleges recognize that it stands for just as much training as any other kind of work, and the student himself would have a more complete notion of what his course of study stands for, if such recognition were given.

We have spoken of the past and present place of commercial work, now let us examine its future. The commercial work has such a firm hold now that it will never cease to be an integral part of the course. If the high-school course is increased to five years, the business course will grow in like measure, and if, as seems probable, that when conditions warrant it, the high-school course is made to include the first two years of the college, the commercial course in high schools must increase until it includes the first two years of the course in commerce and politics. There can be little doubt that this is the present tendency, and considering the rapid progress made in this new field of education twenty years hence will find this

kind of education the safeguard of our business and commercial interests.

Under present conditions it is imperative that commercial students be required to pursue the course in the order mentioned, and so get the benefit of all auxiliary training. There is great danger in permitting too much election in the commercial course, because the inexperienced student often thinks that he has completed the entire course when he has a smattering of spelling, business forms, typewriting and bookkeeping. He forgets that English grammar, composition, modern language, commercial geography, industrial history, industrial chemistry, mathematics, etc., are the necessary concomitants of other studies. This directing of the student's work saves from the business world the raw product, and also saves the school from the charge of doing flimsy, shallow work. The student by such guidance is kept in school and grows in years and general judgment at the same time he is trying to complete the course of instruction prescribed, and so goes forth to business matured and rectified.

The question arises, touching the future of commercial work, as to who should be advised to pursue a commercial course in the high school. Often the entering student, with or without parental advice, has decided this question for himself; but generally it must be settled after the youth comes to the high school. We have answered the question in this way: (1) All students whose parents expect that their formal scholastic education will end with the high-school course, because this course contains more that is immediately usable than any other course; (2) those who are in doubt as to their future career but are sure they cannot, for financial reasons attend any higher institution of learning; (3) all who have natural inclinations toward a business career, and are restless to begin the more strenuous duties of life; (4) all who don't know what they want and can't be persuaded to take any other course.

What should such a four-year commercial course contain in

general? (1) Enough English to enable a student to read intelligently the best literature in the language; (2) enough composition and rhetoric to insure the student's saying briefly and pointedly what he intends to convey; (3) enough penmanship to enable a student to write rapidly and legibly any business task that may be set; (4) enough arithmetic to enable the student to perform quickly and accurately the operations met in any ordinary business; (5) enough algebra and geometry to create a taste for study of somewhat more mathematics than the average business requires, and to provide some surplus mental discipline before real business work begins; (6) enough commercial geography and industrial history to open the mind of the student to the fact that neither commerce nor industry comes by accident, and hence the importance of going to the sources for our information; (7) enough of civics, economics, and business law to make the student see the necessity of having a broad knowledge of men and their dealings with one-another; (8) enough of modern language to enable the student to conduct a foreign correspondence in at least one of the three modern languages, with a good reading knowledge of another; (9) enough laboratory science in each year of the course to train the student to see and classify at a glance; (10) enough bookkeeping, stenography and typewriting to enable the student to perform easily the ordinary demands made upon graduates in such subjects. Such a course may be mastered by a good student in four years, and the average student will have completed such work at or near the age of eighteen years.

No one can realize more keenly than the employer of commercial students, the need of all the auxiliary work mentioned, because general information in such work is becoming more and more necessary in order to command and retain the best positions. Added to this significant fact is its corollary that if a fairly intelligent young man or woman take the training offered by such a four-year course, the strength and breadth of

judgment which comes with years abundantly repays the effort of waiting.

We have attempted to tell briefly what place commercial work had, has, and is to have in the high-school curriculum. We insert here the Commercial Course in the Township High School at Joliet, Ill.

First year.—English; commercial arithmetic and spelling; algebra; physiography.

Second year.—English (rhetoric and composition); European history; commercial geography and mechanical drawing; plane geometry.

Third year.—German, French or Spanish; bookkeeping and office practice; business law and civics; physics.

Fourth year.—Typewriting, stenography and letter writing; political economy or American history; German, French or Spanish; industrial chemistry and physiology.

Any one may secure a copy of this course of study by addressing the writer.

THE PRESENT STATUS AND FUTURE OF MANUAL TRAINING IN THE HIGH SCHOOL

BY

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SYNOPSIS.

Universality of the manual-training idea as shown by the Louisiana Purchase Exposition at St. Louis.

Past expositions show manual training as one of the world's influences.

Universal neglect of fundamental principles of education has been one cause of the rise of manual training.

Manual training is the logical outcome of the teaching of Comenius. Comenius gives the mechanic as illustrating correct methods of teaching.

Similarity of the scientific and manual-training influence.

The Russian plan is generally followed and generally successful.

Distinction between "constructive work" and "mechanic arts," and the appropriateness of the latter for high schools.

Importance of the shop teacher. The dearth of shop teachers.

Effect of recent criticisms in degenerating the mechanic arts.

The new art movement—its influence on the mechanic arts. Great advance in methods of teaching art. Its adaptation to the grades. Over-reaching of the art influence.

Misconception of the true function of art.

True relation between utility, skill and beauty.

Short time given to mechanic arts necessitates close attention to mechanical requirements. Attention to essentials.

All subjects primarily vocational and incidentally cultural.

Artificial distinctions between vocational and cultural studies. All studies at first considered vocational. When a study ceases to be studied for use, it ceases to be valuable for culture.

The trade school—its relation to the mechanic arts in high schools. Danger of over-refinement. How to supply present demands for manual training teachers.

Too much expected of manual training. Its proper sphere and function.

Necessity of extending manual training to needs of boys not taking full academic course. Pre-conceived standards are yielding to more flexible ones.

One of the most obvious and impressive facts bearing on the whole matter of manual training in the schools was set forth and revealed to the world at the Louisiana Purchase Ex-

position at St. Louis, last summer. The fact is simple and will be admitted by all without argument. It is this: Manual training in the schools of all the countries in the world has become universal. No town in any country represented in that vast array of the world's best work undertook to make an exhibit without a display of handicraft of some sort. This does not mean that every school in the world has manual training, for there are many still without it, but it does mean that every town and city taken as a unit has accepted it.

Universal expositions reveal world tendencies and this is strikingly true in the case of manual training. The International Exposition of 1851 at the Crystal Palace marked the beginning of a movement in industrial education—education through the executive functions—that has culminated in a world movement exhibited at the Louisiana Purchase Exposition in 1904 at St. Louis. France had taken first place in the markets of the world for the beauty and finish of her manufactured articles. At the exposition of 1851 the cause of this excellence was revealed. An exhibition of the work of her schools showing great accomplishments in the line of industrial education set other countries to thinking. All the leading countries of Europe immediately took the cue and proceeded to make technical education a leading feature in their schools. This was done not as a matter of theory or sentiment, but as a necessity. Each country recognized that in order to hold its place in the markets of the world it must look after the education in skill and the executive functions of its youth.

Germany began early, perhaps, in a small way even before France, but it was not till the Paris Exposition of 1867 that Germany began to show to the world her rapid progress; and at the Vienna Exposition of 1873 her exhibit, according to the best information I can obtain, excelled all others.

An exhibition at St. Petersburg marks Russia as occupying an important place in this movement. It was here that Victor Della Vos first exhibited the system of tool practice that has formed the ground work of manual-training schools since that

time. This system, usually known as the Russian system, was first exhibited in this country at the Centennial Exposition at Philadelphia in 1876. It was the first attempt at giving instruction and practice in the principles underlying the various mechanical trades without teaching trades as such. Four years later the St. Louis Manual Training School was opened for boys.

The growth of manual training since that time is a matter of common knowledge. It has been a period of advocacy, of strenuous controversy, of school house building and of the gradual expansion of the manual-training idea until there is at the present time none to oppose it. The arguments for the educational and practical value of manual training have done their work and are known to everybody. It is no longer necessary to repeat, or renew these arguments. The conditions which made them necessary have passed. The problem about manual training, with which we now have to deal is of an entirely different character. But before proceeding directly to the consideration of this problem it will be necessary to speak of certain things which gave rise to the movement. This I shall do, not from any desire to criticise past or present conditions, but because our present problem can not be fully comprehended without firmly holding in mind underlying principles which are fundamental. I almost feel like apologizing for referring to these fundamentals, but there is no escaping it. In solving any problem we must go back and review first principles as often as we forget them. The problem before us is no exception.

The fundamental principles of education were laid down by Comenius more than three hundred years ago. But notwithstanding that they were echoed and re-echoed by Bacon, Milton, Locke, Rousseau, Froebel and a host of others, they had and still have to a large extent been forgotten or ignored by those who have taken the lead in educational matters since that time.

These principles are too well known to require repeating here. I shall only quote one of them. It is as follows: "Things to be done should be done by doing." "Mechanics," Comenius says, "understand this well; they do not give the apprentice a lecture upon their trade, but they let him see how they, as masters, do; then they place the tool in his hands and teach him to use it." Thus we see that Comenius selected the mechanic as typifying in his teaching the soul of the true method. The method is of course applicable to other subjects than mechanics, but the teachers of other subjects do not employ it.

The teaching in the schools became stale, lifeless, formal, bookish and impractical; it lacked life and virility and did not meet the demands of a progressing world. The general subconsciousness of this condition at last found expression through representative men in the various fields of educational thought.

It is not necessary to revive old arguments or to reopen closed controversies, but it is important to bear in mind the conditions out of which this universal acceptance of the manual-training idea has grown. Briefly, these conditions were: (1) Educational practice had departed from the fundamental principles of education—from the laws of acquisition. (2) It was necessary to return to these principles in order to meet purely educational requirements. (3) It was necessary to return to them in order to save the nations from commercial and industrial degeneracy; and all countries took up the movement and entered the competition.

The first of these conditions leads us to the consideration of manual training as a subject or branch of educational practice as appropriate to exemplify and revive the practical application of the laws of acquisition. In selecting the mechanic and his apprentice as illustrating the co-ordination of theory and practice, Comenius intimated an educational agency which would not only illustrate the principle, but would at the same time, if actually introduced into the schools, serve as a persistent, active

agency in exemplifying proper methods—an agency which would be in least danger of relapsing into a stereotyped formality.

Modern methods of teaching science have done much to reclaim lost arts in teaching, and manual training has done, and is doing much in exactly the same way. All that has been done since the Centennial Exposition in 1876 toward the introduction of manual training into the schools is justified on purely educational grounds apart from practical or utilitarian considerations. The Russian plan of teaching the principles and practice of construction through the study and manufacture of a series of exercises in regular sequence has been pursued since its introduction for the avowed purpose of general education as distinguished from trade education. It has been persistently held by every practical director of manual-training schools that trades are not taught, but the principles common to all trades are inculcated, and at the same time illustrated practically in the workshop. It has always been strenuously urged that the boys in these school shops are learning the nature of the materials upon which they work, and the processes by which articles of value are made through mechanical skill and art. The practical value of this work has always been freely acknowledged but its full justification has always been sought in its educational value *per se*. I believe the results in most cases of these schools have justified the claim, not only that they furnish a general training in skill of hand, in accuracy, in judgment, but that they have contributed life, sanity and virility in method and purpose to the academic subjects.

The value of this work and the truth of the claims which have been urged for it is proved by the growth, the popularity and the excellence of manual-training schools everywhere.

The success of these schools has been due in large measure to the qualifications of shop teachers who have been selected to teach in these schools and their peculiar fitness to carry out in a practical and efficient manner the requirements of theory and practice of mechanical construction. I mean by mechanical

construction as distinguished from constructive work in general, the intelligent practice in the use of tools which has been evolved by civilized man since the time he left the constructive work of building wigwams and began the mechanical work of building houses. The manipulation of a tool for constructive ends as distinguished from the crude constructive work of animals and savages has a special and a peculiar value which the evolution of ages has given to it. This value is imparted to a class of boys by a skilled mechanic, and it can not be imparted by anybody else. And I mean by a skilled mechanic a man who exemplifies in his own work the best theory and the best practice—a man who puts tools to their latest and best uses in the construction of typical forms.

The importance of the shop teacher is so vital to this whole question that I must dwell upon him a little further at this point. His importance increases as we shall leave the purely educational side of manual training and approach the economic side a little further on.

With the universal acceptance of the manual-training idea there have not come shop teachers in sufficient numbers to supply the demand. This is probably due in large measure to the tardy recognition of the relative value of this teacher. Salaries have not tempted competent men to prepare for a service which offered less than other professions requiring like ability. As a consequence there were not teachers enough properly fitted for the work to supply the needs of the schools as fast as the people were willing to build them. We were left in the possession of an idea without the adequate means of executing it.

Along with this dearth of shop teachers there arose a feeling excited by certain critical writers that while the value of manual training is acknowledged, the form of it in vogue in the schools is of questionable value; that it was becoming too mechanical, that it was not artistic, that the students' exercises were not useful, and that the work was therefore not inter-

esting to the pupils. These criticisms, it should be said, have been offered in a literary rather than in a scientific spirit.

Whether the dearth of shop teachers and a surplus of this literature have any causal connection, the result has been that the shop practice has, in many instances, been so modified as to require only such work as could be done by amateurs and mere tinkers from a mechanical point of view. Mechanic art as such fell into disrepute (temporarily it is to be hoped) and a species of "jack-straw" work was advocated and held to be superior on the ground of its "personal interest," its "usefulness," and its "artistic merit." This condition was strikingly illustrated at the World's Fair exhibit. This influence permeated at least half of the exhibits displayed there—exhibits of trifling objects of "utility" put together without the exercise of much care as to their mechanical value, and tattooed with a burning iron to give them "artistic" significance.

The cause of this temporary degeneracy in the mechanic arts may, in part, be attributed to the overreaching of another influence on which it is proper here to dwell briefly in order better to understand the unrest and chaos into which the minds of some of our shop teachers have recently been thrown.

Along with the growth of the manual-training idea there has been a movement amounting almost to a revolution in the methods of teaching art. In the place of the formal method of teaching drawing by rules, and by teachers regardless of their qualifications for this work there was substituted the artist who carried to it something of reality—some of the spirit of art and truth. Drawing became a means of expression and industrial art took the place of much of the thoughtless copying of classic abstractions. This spirit branched out and expanded in many directions. Adapted to the different grades and the varying ages and capacities of children it appeared as color work, still-life drawing, designing, modelling, decorating, and the various forms of construction work of a non-mechanical character. This movement has done much for the children of the grades in giving them partial relief from that process

of word learning which was so much overdone in the schools of twenty years ago. In placing the children under the influence of this work they draw their elements and units of design sometimes from nature and sometimes from the art and handicraft of the Indians and other primitive peoples.

It seems proper that this work should be given to the children of the primary schools. They are of an age which corresponds to that of the race and to that form of civilization preceding the mechanical. It cultivates the taste, the imagination, and exercises the co-ordinating power between the hand and the head. The spirit of this new art movement has taken absolute possession of the schools in some of our leading cities, and it will perhaps have to be admitted that like other good things long delayed and finally under way it is being somewhat overdone. This is especially true in its attempted application to or substitution for the mechanic arts.

This movement, in the ecstasy of its new being, finds expression in sayings like these: "Teach the beautiful, the useful will take care of itself." "It is not so much to make beautiful things as to make things beautiful." "Work without art is brutality." These phrases sound well, and properly interpreted convey certain truths; but as they have been employed to depreciate and belittle certain essentials and processes not in themselves related to art as a conception, they have done their share of mischief in beclouding and obstructing progress, and in diverting the attention from the larger significance of manual training. It is, of course, admitted that the artistic spirit pervades all good work taken in its aggregate. But it can not be admitted that all processes in mental or constructional acquisition can be accompanied by art at the time they are performing their true educational function.

There is, for example, nothing artistic in the art of finding the proper tense forms of a verb in the study of Latin. In demonstrating a difficult proposition in geometry there would be nothing gained by designating the angles by conventionalized clover leaves instead of by letters and figures. It is plain

that there would be a positive loss, because here the all-important thing is the following of the process of the demonstration. Neither has it ever been thought necessary for the student to demonstrate a proposition for the purpose of playing with it or of putting it to immediate use. In illustrating the parallelogram of forces to a class in physics, there would be nothing gained by constructing the diagram with colored chalk beautifully shaded. It is obvious that such a proceeding would not only be a waste of time but would divert the mind from the all-important thing—the mental process. Art enthusiasm has not taken such liberties with the academic processes in education. Why should it do so with the processes in mechanic arts? The process of making a perfect joint is as absorbing and as cultural in its own special way as is the process of mathematical, syntactical or physical analysis, and why should it be thought necessary to consider the one “brutality” and the others “discipline?” Such expressions all come from a misconception of the real nature and purpose of manual training when it has reached the plane of mechanic arts in the high school, and this misconception has wrought a serious hindrance to the proper shaping and normal growth of this agency as an educational factor in our schools.

In the foregoing, enough has been said directly, or by implication, in defense of the manual-training exercises as they have been employed and have served to give pupils practice in the mechanic arts in our best high schools. These exercises have served a good purpose and still might continue to do so even in the form first employed by Victor Della Vos. But there are men at work in the shops of some of our best high schools with a serious purpose directed toward the improvement of these exercises.

These efforts are being made in answer to these questions: (1) Can an additional value of utility in the thing made be included in the exercise? Can the exercises be made to consist of some useful thing? (2) Can the form of these useful things be so designed and wrought as to answer the legitimate re-

quirements of art? (3) Can this be done without interfering with that sequence in tool practice which is necessary to the development of mechanical skill?

From experiments of this nature which are now being carried on there is some reason to believe that this, to some extent, may be realized. The style of work known as "Arts and Crafts" which is a return to simplicity and truth in mechanical construction and which has come to us through the influence of the work of William Morris and others, seems to furnish a clue to the situation. Articles made after this style, while simple in construction and artistic in form and proportion, require the most rigid application of mechanical principles and are best made by the intelligent use of the best tools. In an "Arts and Crafts" table, for example, all the elements and processes are revealed in the finished product. The through mortise and keyed tenon call for the most genuine workmanship. Here the beauty is in the workmanship. It is its truth, its mechanical genuineness which gives it its value—its beauty. In the making of such a table the assembling of its four sides calls for a greater accuracy of construction than is required in making a single union of mortise and tenon, for it is in the assembling of parts that the defects and inaccuracies are revealed. It seems to me that such a table, well made, would be proof enough that a pupil had mastered the principles and practice of joinery, for it contains most of the elements of the Russian exercises.

I have just witnessed with the keenest interest and satisfaction the completion of such a table by two boys. The boys selected for the experiment were the best in a class of twenty-four. The results are instructive from several standpoints. First, from that of the time required which was almost equal to that given to the whole joinery course, they being allowed to work overtime and during outside hours. Second, from the skill it was necessary to have before beginning the work in order not to waste material. They spoiled one or two pieces as it was. Third, the pride and intense interest they took during the process. Fourth, the excellence of the quality of the work

when completed and the confidence and sense of power they enjoyed at the finish. None of their pleasure in this case came from ownership in the thing made for it was to be the property of the school. The consciousness of skill and power was their reward.

From the first of these results, it seems plain that the time usually given to manual training is too short to accomplish a finished product that will be worth anything as an educational exercise, with the exception of the very best and most active students. It may be noted here, however, that during the construction of this table the other boys in the class were working on a small model exercise of a table leg with entering rails, and their interest in their own exercise seemed increased rather than diminished by what the two boys were doing on the large table. It enabled them better to see the real purpose of their exercise and what it would lead them to.

From the second result it is plain that much practice on small exercises is necessary in learning the use of tools and the elementary processes before putting beginners to wasting large pieces of "stock" which would result without such practice.

The third result is important. Boys take a genuine interest in things that are really essential. And the essential thing here is the power to do things as men do them. The power to use a tool as a mechanic uses it is a real accomplishment at once recognized and appreciated by the average boy. This accomplishment is capital which has a real value not only as an educational force but one which is recognized by the mechanical and commercial world. A great mistake is being made by schools which are keeping boys occupied on mere tinkering that will never count for anything either as education or as utility.

Thus far I have considered the educational aspects of manual training. I now pass to its so-called economic or vocational aspects. This I do more for the purpose of calling attention to the artificial distinction which is often made between culture studies and vocational studies than for the purpose of perpetu-

ating this distinction by treating these subjects under separate heads.

In thinking of this question we often lose sight of the fact that all school studies are vocational and had their origin in the course from purely economic considerations. The first schools for higher education in this country were for preparing young men for the ministry and the curriculum was planned with that end in view. Greek and Latin were placed in the course because a minister was supposed to need them in his business. They were purely vocational. The Boston Latin School was established in 1635. In a school document the vocational character of this school is clearly defined: "It prepares boys for college. Thence they go out to follow the professions of divinity, law, and medicine."—School Document No. 15, 1889. The subjects were chosen with special reference to their practical value to the students preparing for these vocations. They were vocational studies. The universally recognized vocational character of the ordinary school studies has placed them in every school curriculum of the past regardless of the specific purpose of the school. Even in the trade schools the vocational character of the common school branches is assumed.

One or two examples will be sufficient to illustrate this fact. In the famous school of Watch Manufacture at Besançon, France, the course of study includes "everything bearing upon the work, such as arithmetic, mensuration, geography, mechanical drawing, geometry and composition." These studies are selected solely for their vocational value as much as is the tool work in the shops of this great school. Attached to the great printing house of Messieurs. Chaix et Compagnie, in Paris, there is a school for the education of the printers. Two hours a day are allotted to lessons in the schoolroom which is contiguous to the workshop. The course includes "grammar, and composition, arithmetic, reading of proofs, the study of types, engraving, and the reading and composing of English, German, Latin and Greek as far as to qualify for type setting,"

and a variety of other studies chiefly having a bearing upon the business of printing.

The diversity of courses of studies in colleges and schools in all places and at all times indicates that different people need different things as they will occupy this or that station, or will choose this or the other vocation. The theory that some studies are for use and others for culture probably originated among school teachers who wished to secure students. This notion persists even now, but it is seldom acted upon by those who are free to choose for themselves. All studies found their places in school curricula because they were useful to some vocations. Manual training is vocational as other studies are vocational. If properly taught it is directly useful to some vocations and indirectly useful to others. The same may be said of Greek, Latin, mathematics and music.

If it be contended that music is better than mechanics for a person who does not expect to follow either as a vocation, it may be answered that it would depend almost wholly on the tastes and powers of the individual. As a cultural accomplishment certainly none served to better advantage in studying the World's Fair than did a knowledge of practical mechanics. Of course, it goes without saying that it would be exceedingly desirable if one could learn everything, but as this is becoming more and more impossible, each and all must pursue those subjects that relate to their particular vocation. As everybody does this anyway the only apology which I make for the statement lies in the curious fact that educators are continually making the theoretical distinction between "cultural" and "vocational" subjects. The only subjects which are absolutely and necessarily common to all are the three R's.

I shall now state a proposition which will not receive universal assent, but which is, I believe, gaining ground in the minds of practical teachers. This proposition will clear the ground and open the way for a rational treatment of the present status of manual training in the high school and for consideration of its future.

The proposition is this: *When a subject ceases to be studied for use, it ceases to be valuable for culture.* I mean by use the power necessary to employ the thing learned as it was originally employed. If a language, as a medium of communication; if mathematics, as a means of actual measurement of quantity; if the mechanic arts, as power to construct according to the laws of mechanical construction and the best practice of mechanics.

When German and French were first introduced into the schools they were intended to be taught as vehicles of thought between these nationalities and not as mere media through which the laws of syntax and the rules of grammar might be illustrated and applied. When these languages can be used as vehicles of thought they become real culture studies, but the grammar and translation methods of learning them is beginning to be believed to be almost useless either as culture or as use; and a reaction is taking place toward a more direct method. When mathematics had its beginning, it was treated as a means to the measurement of quantity; it dwindled into mere abstraction and the manipulation of symbols and formulæ. A reaction is also taking place toward concrete methods of teaching it. As all school subjects have thus suffered at the hands of impractical teachers—have been allowed to drift away from their real function into “culture” studies, it is not surprising that manual training should suffer a similar fate. We see this tendency in the present movement to remove the real, the characteristic element—the purely mechanical quality—and substitute in its place a mere sentiment in the form of trinkets put together in the name of art, but devoid of the first principles of art, which, when applied to construction must be based on utility and truth as shown by work revealing strength and purpose and adaptation in the arts of machine building and architecture.

Manual training, like other subjects, had its origin in purely utilitarian motives. The first schools were strictly trade schools and had no conscious purpose beyond that of fitting the boy

for his future vocation. Of course, the cultural value was present as it was with the academic branches which were pursued along with the manual training—present, I believe, in truth rather than in mere name. The students from these schools rise above the common laborer and the unskilled workman and take their places among those most worthy to be honored—those who do the work that the world wants done.

Good results from manual training have come from the trade schools, because it is here that the work is directed to a purpose, and this purpose calls for the employment of tools as skilled mechanics use them; because it is here that true culture, the power to do, is made possible by the use of tools and machinery in their latest and most evolved forms—forms employed by mechanics. The progress which has been made in Europe along these lines has come almost entirely through the technical and trade schools established for the purpose of fitting boys for a vocation.

But I am not advocating that the trade school take the place of our manual training in our American high schools, although if I were to close this paper here, it would appear so. *But I am advocating that the work in our manual-training high schools should be done as mechanics do it; i. e., the process employed should be the processes employed by mechanics.* If this is not preserved in our high schools the work will degenerate into a mere tinkering, possessing neither culture nor utility. The work in the schools of America must be such as to fit the boy to use what he has learned in a way that will command the respect of a practical mechanic and possess that sturdy and substantial quality which can be utilized in securing employment. This power to do, even if by chance his lot casts him into unrelated pursuits, he will still possess as culture, as reserve power—power which does not come at all in the making of tops and whistles and childish trinkets.

We are in danger of weakening manual training in our high schools by an effeminate over-refinement, and by a fear that our workshops will be regarded by somebody as coarse

and unrefined. This fear has led in some places to calling them "mechanical laboratories" instead of shops. Of course we all know that they are really laboratories in which the principles of mechanics are taught and applied in a way different from that which an apprentice boy picks up in a commercial shop, but to all intents and purposes these school work-rooms are shops in which the work is pursued in the true workman-like spirit. The name shop should be retained because it conveys to the common people a definite idea of something tangible—an idea of a preparation for life's duties.

I can not share the fear of those who believe that there is danger of our shops becoming too practical—too much like real workshops. On the contrary, I would make them as near like real shops as possible, and through skilled mechanics as teachers make use of the latest processes used by the latest and best practice. These processes are secured through exercises and the manufacture of projects adapted to the capacity of the student. If possible, these teachers should be technically and broadly educated as many of them are. But above all things the shop teacher should be a practical man, a man who can command the respect of boys through his tools and his manner of using them.

Again let me emphasize the necessity of in some way meeting this enormous demand for the right kind of shop teacher. The success of manual training in this country depends upon it. It is plain that if there are not men enough to do the work as it should be done, then the work itself will be modified to a form which can be done by the unfit—the mechanically incompetent.

The greatest danger to manual training comes from an idea in the minds of many that manual training must do everything and contain everything. It is an important and indispensable element in our schools but it has its own special value. Its function is to keep our youth from drifting too far away from the industries of daily life, and to make their preparation for them in the best possible manner.

To those who would have the workshop possess all the

educational qualities represented by the whole curriculum, let me say that if the shop represented the whole of the boy's education and employed all of his time there would be just grounds for concern; but this is not the case. In reality the workshop at most can occupy only a very small portion of his time and it therefore seems to me important that this time be spent under an influence that will supplement rather than repeat the peculiar and more or less abstract and refined influences of the other departments in the school. Much as I would wish to see in the shop teacher, an artist, a thorough scholar and a finished musician, if all these things were possible; much as I would like to see our school shops possess all the combined influences of artistic, academic and musical influences—such a wish is manifestly absurd. All these influences stand for what they are and are valuable as necessary elements which make a complete and all-sided whole. So should it be with manual training. Let it stand for what it is, the necessary, fundamental influence in shaping the boy's education for a practical, sane, intelligent, industrial life.

So important is this sturdy mechanical influence to a boy's training that I firmly believe if he could spend a part of his time while taking his course of regular studies, even in a common commercial workshop with real workmen, it would be better, far better, for his education and training as a whole than is the piddling jack-straw work that is sure to be done in schools employing non-mechanical teachers.

This is of so much importance to the future success of manual training in this country as almost to justify the suggestion that the present dearth of shop teachers might, if necessary, be bridged over by intelligent practical mechanics, even though they be somewhat deficient in book-learning. Such men in the shops might perhaps require the more frequent presence of the principal or intelligent assistants to guard against that crudeness of speech and want of the proper moral and intellectual influence which might otherwise result. That such a suggestion should be necessary at this time is to be deplored and it

may, I fear, although offered as a mere suggestion, seem like heresy to my fellow believers in high ideals in manual training. But let it be remembered that "it is a condition and not a theory" that we now have to face—the condition of meeting the universal demand for the mechanical element in our schools. This condition must be met. The expectations which the activity of the past decade has aroused must not be disappointed. The bridge we now have to construct over the inadequate and real present to the adequate and ideal future, if it can not from a lack of skilled teachers be built on scientific and artistic lines in all its parts, it must at least be built strong, rugged and practical, giving those who are passing over it a feeling of safety, if not of complete æsthetic satisfaction. In closing this paper I shall try to point out a condition in our schools which it seems to me right and reasonable to hope for in this country—a condition which is already being partially realized in a very few places.

In the most evolved type of modern high schools, there is nothing in the name to indicate that manual training is in the curriculum, yet these schools have an equipment in manual training for both boys and girls surpassing that of earlier "Manual Training High Schools" so called. This equipment has taken its place naturally as has that of science laboratories, as an essential and integral part of the high school. While "Manual Training" has disappeared from the name, the equipment for this work has been increased and improved. The tools and machinery are of the latest design and call for teachers skilled in practical and theoretical mechanics. The Art departments are conducted on industrial as well as artistic lines and correlate closely with the shops in suggesting appropriate designs. These schools contain all the academic branches; and an elective plan from groups of studies enables a pupil to select a course adapted to his wishes and his future needs.

In the shops these things are held to be essential and in the following order: 1. The utility of the exercise or the thing made. 2. Good workmanship. 3. Beauty in construction.

The usefulness of the thing made may mean that it may be of immediate use, as a piece of furniture, a lamp stand, a pair of andirons, or a jack screw; or it may mean an exercise into which a boy has put his best efforts in expressing the correct elements of mechanical construction, the further usefulness of which will afterwards be realized in every piece of mechanical work he will ever do.

The short time which, at best, can be given to shop work will not enable all boys to realize finished products in the shape of usable articles, except of the simplest kind, but this time if spent rightly will make even the slow boy's work in the proper use of his tools respectable in the eyes of practical people. A boy who can finish one mortise and tenon joint and make it well will be more proud of it than he would be of a finished trinket which he could buy at a ten cent store. Boys like to work "man-fashion" and by making the work robust and real from a mechanical point of view the introduction of manual training is justified and appreciated by the people who are sending their children to school to prepare for life's responsibilities. Finished products are realized by some of the pupils who are stronger and faster than others and these stand as models to show even the slower ones the real nature of the work, and the direction toward which it is tending.

The second essential, good workmanship, can be realized in a boy's exercise, be it ever so little; it may consist in the proper use of his tools and the mastery of the elementary processes of mechanical construction; or it may go further in a stronger boy and appear in a well made piece of furniture or a piece of machinery; but be it finished or unfinished, it must be in the right direction as far as it has proceeded—a direction which counts for something considered either from a cultural or from an economic standpoint. It must demonstrate power to do—power to use the tool as an evolved civilizing agency.

The third essential, that of beauty in form and proportion is important. Good designs are constantly placed before the students and they are encouraged to make original ones. Many

boys make fairly creditable designs of simple orders, after the suggestion has been given them. In the planning of a useful article by those who in the short time which can be given to this work get ready for it, careful attention is given to form and proportion. The teacher supplies that which the pupil would fail to do if left to himself. This he may do by suggestion or by furnishing the whole design according to the ability of the pupil. All pupils can not be treated in the same way. No time is spent in surface decoration before the elementary processes of construction have been pretty well mastered.

Manual training in the high schools should be open to those who want it. It should not be forced upon those who do not want it; and there is a growing feeling that this should be the case with many other high-school studies which are at present made obligatory.

[The manual-training high school of the future will probably extend its usefulness by providing special work of a more intensive character for those who are especially adapted to mechanical pursuits and who show very poor ability in academic lines. The high school of the present has not provided this work for boys who are unable to take the full academic course. The result is that it often happens that the boys who want manual training and who need it most are forced to leave school on account of inability in other lines. The true function of the public high school is to find every boy of high school age and keep him at his best during the high-school period. Pre-conceived standards of scholarship have their uses, but they should not be allowed to stand between the real teacher and the real boy as the teacher finds him.]

[The course of study that follows is worthy of careful study. It is especially advantageous because the vocational courses can be seen in their relation to the whole.—Ed.]

MODEL HIGH SCHOOL COURSE

PREPARED BY GILBERT E. MORRISON

ST. LOUIS.

1905

| CLASS | YEAR | BUSINESS | DRAWING | | ENGLISH | HISTORY AND ECONOMICS | LANGUAGE | | | | MANUAL TRAINING | | APPLIED PHYSICS | MUSIC | PHYSICAL CULTURE | SCIENCE | |
|--------|--------|--|--------------------------------|------------|-----------------------------------|-----------------------|----------------|-------|-------|---------|--------------------|------------------|-----------------------|----------------------|--------------------|------------------|------------|
| | | | ART | MECHANICAL | | | GERMAN | GREEK | LATIN | SPANISH | SEWING | WOODWORKING | | | | ANATOMY | PHYSIOLOGY |
| FIRST | FIRST | Commercial Arithmetic, Bookkeeping, Penmanship | Modeling, Pattern, Composition | | Business, Grammar and Composition | Recent | French, German | | Latin | Spanish | Embroidery, Sewing | Tracing, Joining | Chemistry and Physics | Calculus and Reading | Class Drill, Games | Zoology, Hygiene | Biology |
| SECOND | FIRST | Commercial Arithmetic, Bookkeeping, Penmanship | Modeling, Pattern, Composition | | Business, Grammar and Composition | Medieval | French, German | | Latin | Spanish | Tracing, Sewing | Tracing, Joining | Chemistry and Physics | Calculus and Reading | Class Drill, Games | Zoology, Hygiene | Biology |
| SECOND | SECOND | Commercial Arithmetic, Bookkeeping, Penmanship | Modeling, Pattern, Composition | | Business, Grammar and Composition | Modern | French, German | Greek | Latin | Spanish | Tracing, Sewing | Tracing, Joining | Chemistry and Physics | Calculus and Reading | Class Drill, Games | Zoology, Hygiene | Biology |
| THIRD | FIRST | Commercial Arithmetic, Bookkeeping, Penmanship | Modeling, Pattern, Composition | | Business, Grammar and Composition | Modern | French, German | Greek | Latin | Spanish | Tracing, Sewing | Tracing, Joining | Chemistry and Physics | Calculus and Reading | Class Drill, Games | Zoology, Hygiene | Biology |
| THIRD | SECOND | Commercial Arithmetic, Bookkeeping, Penmanship | Modeling, Pattern, Composition | | Business, Grammar and Composition | Modern | French, German | Greek | Latin | Spanish | Tracing, Sewing | Tracing, Joining | Chemistry and Physics | Calculus and Reading | Class Drill, Games | Zoology, Hygiene | Biology |
| FOURTH | FIRST | Commercial Arithmetic, Bookkeeping, Penmanship | Modeling, Pattern, Composition | | Business, Grammar and Composition | Modern | French, German | Greek | Latin | Spanish | Tracing, Sewing | Tracing, Joining | Chemistry and Physics | Calculus and Reading | Class Drill, Games | Zoology, Hygiene | Biology |
| FOURTH | SECOND | Commercial Arithmetic, Bookkeeping, Penmanship | Modeling, Pattern, Composition | | Business, Grammar and Composition | Modern | French, German | Greek | Latin | Spanish | Tracing, Sewing | Tracing, Joining | Chemistry and Physics | Calculus and Reading | Class Drill, Games | Zoology, Hygiene | Biology |

NOTE:—This schedule of studies provides for the work which should be furnished by a large high school. From this schedule any combination of courses can be devised to suit the various opinions concerning such matters. But it is suggested in view of the growing tendency toward flexibility that the making up of pupils' courses be entirely individual, each pupil's needs and desires being considered separately and his work made up term by term from a partial cross section through the schedule horizontally.

THE PRESENT STATUS AND FUTURE DEVELOPMENT OF DOMESTIC SCIENCE COURSES IN THE HIGH SCHOOL

ELLEN H. RICHARDS
Massachusetts Institute of Technology

SYNOPSIS

Subjects of *social* value must be given in the *elementary* school in such a way as to secure valuable habits and manipulative skill.

Development of reasoning power, and application of science belong in the high school.

Principles and relations should receive special attention in colleges.

Practice again belongs in professional and post-college schools.

Domestic science in the high school should concern itself enough with the working machine of productive daily life (social and economic questions in an elementary way to be sure) to leave an impression of forceful reality.

It should not be burdened with the work of other departments and especially it should not be expected to *lay its own foundation*, a thing not required of other high school subjects.

In elementary and secondary schools, we claim that education should produce:

Social efficiency, character as expressed by truth, honor, self-sacrifice and co-operation.

Economic efficiency, self-support, not a social debtor, adding to group possessions and pleasures, a productive citizen of the state.

Individual efficiency, personal health, joy in living, contributing, in self and children, to race progress. For the individual, better physical condition for work and for pleasure. For the state, it should result in securing for the child such environment and atmosphere as shall permit full intellectual and spiritual development of the soul.

A good course in domestic science can contribute largely to the production of these educational results.

The teaching of science in the high school has suffered because of the tradition prevailing since the organization of the English High School of Boston in 1821, "that it is required of all the masters and ushers as a necessary qualification that they should have been regularly educated at some university."

The attitude of the university man toward science and particularly toward those branches of science which have to do with the activity of daily life is not an attitude adapted to make him a good judge of or a good teacher of those sciences which deal with "*the great end and real business of living*" which was the avowed object of the first chartered academy in New England—Philips Andover. The high school as we know it, while the successor of the academy in many directions has not yet obtained full emancipation from the college influence, since its courses and the method of dealing with many of its subjects are to a great degree controlled by university ideals through the college men on its staff.

We shall not see the full development of science teaching in the high school, and of all that depends upon it, until the teachers are those trained in scientific rather than in academic ideals.

If by high school we understand a truly higher education, complete in itself as far as it goes, but yet a safe foundation for college and university work for those who can go on, then a form of applied art and science is imperative for the rounding out of a course which is to teach the human being something of his environment, to teach the laws under which he lives and to lead him to appreciate the power which is his to use as soon as he is worthy.

In the high school should begin the application of such sciences as have been learned, which may be continued into the college, or which may serve as a basis for future building upon in the course of the life work.

The high school has ever been "near to the people" in the endeavor to make the years and money spent effective. It has been at times more plastic than any other form of education, more readily molded to the need of the time. This is shown by the rapid introduction of laboratories and laboratory methods and by the engrafting of business and commercial subjects upon the curriculum. And yet each study which tends toward "the great end and real business of living" has been through

the ordeal of college entrance requirement successfully passed, such as geography, which was first required at Harvard in 1807, algebra in 1824, ancient history in 1847.

Let it be granted that the theory on which the American high school is to be developed in the twentieth century is not yet clearly defined. We see two tendencies, the one fostered by the academic ideal as set forth by college entrance boards "to emphasize the psychology of the individual" and to articulate the work with the college. The other to meet the demands of civilized and progressive society as it exists, by a differentiation which shall give restricted freedom of choice to the pupils. This differentiation has been, perhaps, most marked of late in the subject of manual training. But it has resulted in cleavage rather than in articulation. Because the great body of school men have had no training in and do not understand the power and purpose of manual training, it has been found best to develop it in separate schools in such communities as are large enough to support two or more high schools, under teachers who believe in the invigorating intellectual effect of "an intelligent mastery of tools, materials and methods of construction," and in the fully proved pedagogic value of this stimulus of power over things.

Because of the opposition of the academic mind to the introduction of manual training, it was put in under the lead of those who were most strongly impressed with its practical value. It could not be properly correlated in the ordinary school, because the opposition presented a solid front. Only recently have wedges been driven into the slowly crumbling walls of prejudice, so that now a possibility of using the subject to stimulate all pupils, whether fitting for college or for life, is in sight. Domestic science has been in an even worse plight. Repudiated by manual training, and scorned by academic learning, it has made its way by sheer force of proved value. It has come to stay, and we may as well take up the task of adjusting the relation it should bear.

It may be acknowledged at the outset that much, if not

most, of the domestic science now taught in high schools, especially when it is found in them only, is *grade work*—mere accumulation of facts and mere manipulation—with perhaps an attempt at introducing fundamental science because in no other course is it found; or, more is the pity, because the curriculum demands that the domestic science be given *before* the fundamental science courses are taken. That is, the makers of the high school program do not recognize domestic science as an *application* of scientific knowledge *previously* attained, do not give it the place of a king bolt to hold together the previously accumulated parts of the curriculum.

Furthermore, because the science teacher could not or would not help to correlate the various branches, the teacher of domestic science has been obliged to give both the elementary science and the application of it to the detriment of the subject itself and to its estimation by the public. The time given has not been sufficient, the knowledge of the dozen sciences required as a foundation has not been deep enough on the part of the teacher; she has not dared to say "I do not know;" and therefore the better grounded physics and chemistry teacher has had reason to repudiate the claims made to scientific presentation of domestic science.

On the other hand, because of this forcing of the science teaching into imperfectly prepared hands, the work intruded into the high-school curriculum under the head of domestic science has been too often not only unscientific but has lacked any basis of science.

If the high school were a trade school, dealing with results, not principles, then the practice might be accepted without the theory. A typewriter is not required to learn the mathematical formulae upon which the mechanical construction of his machine depends. Why should a girl learn how to calculate a standard dietary? If she is to be a cook she should not spend time for it. But if she is to become an intelligent citizen, serving not only her own family but on charity and hospital boards,

she needs the knowledge, and more than all, she needs the intellectual grasp of affairs which her mind gains in the process.

The terms science and art have been sadly confused. Because a Vermont Yankee or a southern mammy, by reason of long years of skilled labor and a love of good living, can make a score of dishes of exquisite flavor and consistency, it is held by many school men unnecessary and unpedagogical to teach the composition and nutritive properties of food and the scientific principles which underlie its proper preparation. The high school does not and should not make cooks, it should make girls into intelligent women, intelligent in every day matters as well as in ancient history. The public has insisted upon the skill which only comes with the long practice of a trade, *i. e.*, an art. Between the three, the science teacher, the pedagogue, and the public, the director of domestic science has been driven to offer a course which is either science or art in spots. She must include much which has no science, but which is only method of procedure, order or acknowledged way of doing things. This is because public ignorance has insisted that work which has no science at bottom shall be called by that attractive title.

There are correct ways (good form) of wearing a hat, of serving a meal, of paring an apple, of toasting bread; but although there may be a better, there is no right or wrong way. It is the result which is to be considered and this is arrived at by several methods. There is a right way to set up an electric battery but not to sweep a room. Did two milliners or dress-makers or cooks ever accomplish results in the same way?

It is the insistence on good form in place of science, on the art rather than on the knowledge of principles which has brought so much of the household arts teaching into disrepute among scientific men and academic leaders.

Is there then neither science nor education in the group of subjects known as domestic science? Indeed there is much of both if properly introduced and correlated, but foreign matter introduced into living tissue is certain to cause irritation; and

because of public demand and because it was less expensive to equip one high school with kitchen and sewing room than to fit up thirty grade schools, the teaching of facts and habits and of mere methods of work has found its way into a position it cannot maintain.

Personal habits useful for the survival of the human animal in its present surroundings must be thoroughly learned at an early age. The high school comes too late, the mischief is done and can be undone only with tears and time. Muscle training in relation to future practical application, use of saw and plane, of needle and of cooking processes to be successfully and *economically* given must come before high-school age. Mere tool work, mere cooking and sewing belongs in the grades where each motion learned stays learned. Muscle never forgets. In other words, the work of the grades should include *manipulation* of as many as possible of the materials which enter into the daily routine of life without attempted explanations. The child of ten or twelve can learn to boil and filter water and to wash hands and face, to keep fingers clean and off from possible dirt, to cook vegetables and broil steak, to make chairs and tables for a model house, to make anything to scale from drawings, to choose colors and fabrics. He may learn the thousand and one *habits* and muscular motions which acquired at this age without conscious effort, are never forgotten.

To explain this position it only need be assumed that subjects and methods which have great social value, which are necessary to the welfare of the community, must be taught in the elementary school where alone *all* citizens receive an impetus toward individual and civic efficiency.

Secondary education, on the other hand, reaches a class upon whom we ought to be able to depend for the application to every day life of the results of scientific investigations in hygiene and sanitation; but at present there is little sympathy and co-operation between the investigator and the public. This sympathy can be established by those who are interested in practical affairs and who have been so educated as to understand

the scientific spirit and to be conversant with the scientific method of work.

If the teacher of domestic science in the secondary school is to form part of this important connection between theory and practice, and is to aid in establishing sympathetic relations between the investigator and the public, she must have opportunity for a more thorough scientific training than our present normal courses offer.

Once this stand is taken, the curriculum of the high school is relieved of one part of its present incubus. But a stumbling block remains in the sequence of science subjects as now tabulated. Chemistry is often found in the fourth year and cooking in the first; drawing in the third year and sewing in the second. The difficulty will disappear once the subjects are accepted not as ends in themselves, but as foundations on which to build.

The following outline for an ordinary high school, not one devoted to manual training particularly, is given as suggestive of a logical order, each year being an addition firmly welded to what has gone before. The assumption is made of good "grade" foundation in elementary botany, physiology, etc., and in manual and physical training. The time taken is distributed so as not to interfere with the other essentials. The serious change is in introducing the sciences earlier than usual, and in a somewhat different order. The reason will be evident on examining the character and range of the illustrations.

The civic and economic side requires maturity of mind, and brought in at the end enables the young student to gather up all school experience into an ethical ideal of great value as school is left behind and life is entered upon. If something on this order is not given, the scholar goes out into the world not only ill prepared to meet conditions, but with the feeling that school has been of no value, or has had no connection with what follows.

It is true that physics is more often a second year study; but certain aspects can be given in the first year of the high

school better than chemistry and there is a gain in dividing a subject of so much theory and so capable of developing reasoning power. There is an advantage in impressing upon the young student the fact that a science can never be finished—it goes on into the university, the professional school, life. School physics should not deal with the whole science but with parts of it especially adapted to the student.

AN OUTLINE FOR DOMESTIC SCIENCE IN THE HIGH SCHOOL
(Based upon at least three years' work in the grades in which evident facts and manual skill have been acquired.)

First year: 3 to 4 hours weekly.

Hygiene.—First aid to the injured; standards of personal health emphasized.

Physiology.—Review; study of functions, etc.

Drawing.—Working drawings, form, design, color, historic ornament.

Textiles.—General study of, including their uses; form and color as applied to garments.

Physics.—Mechanics of solids, liquids, gases; heat.

Second year: 3 to 4 hours weekly.

(Science applied in cooking, cleaning, and other aspects of domestic life.)

Historical.—Practice in use of library.

Experiments.—Showing effects of heat, expansion of gases, etc.

Economic botany.—Plants and seeds used for fabrics and food. Drawing and design may be continued in this connection.

General chemistry.—(First half year.) Emphasis given to elements that enter into foods.

Physics.—(Second half year.) Heat reviewed; electricity.

Third year: 3 to 6 hours weekly.

(Applications of scientific principles to daily life.)

Physiology of digestion.—Saliva; pepsin; intestinal digestion; pre-digested foods.

Preparation of foods.—Protein foods; carbo-hydrates; fats; food adjuncts.

Foods for the sick.

Balanced ration.—Dietary study for one day; marketing; meals cooked and served; (this is not essential in the college preparatory course.)

Biology.—Most familiar plants; algæ; molds; mildews; yeasts; bacteria in air, water and food.

Chemistry.—Analysis, including ash of foods; preservatives.

Fourth year: 4 to 6 hours weekly.

Sanitation and civics.—(1) House—soil, surroundings, construction, plans, plumbing, ventilation, heating, cleaning. (2) Food—water supply; purity in foods. (3) City—laws on sanitation. (4) Disease—prevention; care of sick.

Economics.—Cost of living—house, clothing, food; higher life; standards.

Chemistry and physics.—Applied in air analysis and disinfection; in discussing plumbing, ventilation, heating, house site.

Botany.—Review bacteriology.

Drawing and design.—House plans; house decoration—form, color, materials, use. (Color and form in dress may be elective.)

An indispensable adjunct to any high-school course is the collecting of material for a school museum. To be educative in the fullest sense this museum should be the work of the class itself and when completed may be given to an industrial school in the neighborhood or exchanged for a collection made East, South or West or in a foreign country, selections being retained for the home museum.

Drawings, models and sketches may be kept on file for the criticism of the next class; also menus and photographs of the table as correctly laid.

Colored photographs of the designs in house and dress will serve as a basis for advance and will save much time in acquiring a right point of view.

Photographs of badly kept alleys, as well as of cleanly; of streets with cheerful window boxes, contributed by the boys, will tend to unite the school in ideals of civic improvement.

Indeed, the school museum should be the joint work of the boys and girls. The application of their common science may be various but the commonness should be brought out. There is not one chemistry for the farmer and another for the housewife, only different applications of the same science.

The above is a mere sketch of the order in which application may be brought in to fix the principles taught. Exercises in English composition for both boys and girls may cover the investigation of shops and markets, of means of transportation and methods of manufacture.

The futility of much of our present teaching is illustrated by the answers of a high school graduate to questions on electricity and its uses. "There were two kinds, one in the clouds and one kept in jars. It was used to run batteries and to light the gas." This child lived in a city with electric cars and electric lights in the streets.

The public money expended on high schools should produce more effect on the progress of the community. For these selected children should be in training for efficient, capable leadership in public as well as domestic affairs. The wise spending of money from the public purse for the general welfare requires a knowledge of the materials and processes used in the service of the state. The much deplored graft is possible only when the majority are so ignorant as to permit of misappropriation of public funds.

If, as has been claimed, domestic science has for its chief object the teaching of the fourth R, right living, then it means present day knowledge applied to the home, with as much educative manipulation as is needed. But the basis of the teaching is scientific truth made to do service for better family living. This applied science is of the nature of other well developed courses in which physics, chemistry, biology and engineering are drawn upon for laying foundations for social habits which shall lead to successful results in human efficiency. It is not, as found in the school course, for the purpose of trade training any more than the teaching of music, now so firmly insisted upon, is given for the purpose of making great artists. It is, or should be, given with the same end in view as music, drawing, and French—that is, of developing the powers of the individual, of enabling him to enjoy this world more, to care for himself better, to live a saner, more wholesome life.

If the elementary school gives the foundation of habit and of manipulative skill, the secondary school can build a structure of reasoning power, can require the pupil to *think out* the probable result of certain proposed combinations, such as the form which certain mechanical operations should assume, or the re-

sults which given chemical combinations will produce. The secondary school can put in the hands of the pupil such tools as will excite the brain to activity, to curiosity, if you will, as to the why and how.

I believe it to be a lamentable fact that much of our high-school science is now wasted because the pupil sees no more use in it than in Greek verbs, and that just the fillip of interest could be added by the illustration of application in daily affairs. The unknown and the abstract must be closely connected with the known and concrete, else the art of learning will not be acquired. Fully ninety per cent of the pupils who take courses in physics in the high schools (and in colleges as well) will open the window at the bottom to let out bad air, although they know the abstract fact that gases will expand and rise when heated. Perhaps ten per cent of these same pupils will clean gloves close to the gas jet or light a fire with kerosene. The interest of the child of high-school age could be caught easily and fixed by illustrations of and demonstrations with the materials of daily use in our homes. Interest once aroused, the *reason* for the phenomena seen and the desire for experimentation to discover other phenomena is easily developed. Abstract science does not fix the attention sufficiently to make a lasting impression in the case of the average pupil of high-school age.

This illustration of scientific principle by the activities of daily life is rendered imperative in the school *because it is not made in the home*—because of the failure of the parents and the home to do for the children of today what the parents did for the children of the day before our system of education was developed. This failure is due not to incompetence, it is due to an impossibility for any mind, except it is trained to think along modern lines, to take in, for instance, the significance of the practical possibilities of the discovery of x-rays and radium. The average parent has scarcely become adjusted to microbes and toxins. He does not know the meaning of half the words his young children use so glibly.

It may be replied correctly that we all use means and ma-

terials without knowing anything about their nature, and it may be argued that therefore it is not necessary for any but the manufacturer to know fundamental principles. For practical purposes it is sufficient to press the button or turn on the switch without knowing anything about the native properties of electricity.

In a sense this is true. The under carpenter uses boiled linseed oil to polish off the woodwork in a college hall or fine residence. If the head man, who does know, happens to be by when he has finished, he will see to it that, if it cannot be burned at once the soaked cloth is put in a metal receptacle on a cement floor. If, however, the workman is by himself, he is more than likely (judging from experience) to drop the cloth down the nearest hole under the porch, rather than to take the trouble to go the length of the building and put it away properly. He does not *believe* it will do harm. Result, a fire and destruction of the building.

A scrutiny of the newspaper columns for one week only would convince the most skeptical that hundreds of lives and millions of money are lost because of the ignorance of the masses of the dangers which they incur along the path of their daily duties.

Since prevention is an accepted method of dealing with other evils, why not, in the course of education, give the child the means for his protection? Then *interest* him in science by showing him the *use* of it. It seems to be a universal truth that all children have an instinct which leads them to apply all the facts they get. It may be that much of what looks like application is mere imitation, but my experience with boys and girls only twelve years of age in our public schools leads me to believe they are quick at real application of scientific principles if properly presented.

When all has been said, however, it remains true that the greatest opportunities to promote social welfare and social progress lie not in the better organization of business and manufactures, nor in the fairer distribution of income, although

there are great opportunities in these directions, but precisely in this field which woman is urged to abandon, viz., in the better use of social resources, the better organization and direction of our domestic affairs.

If, as Carroll D. Wright states, the struggle of labor is and ever will be toward a higher standard of living, then it is a legitimate use of public funds to give to those educated at public expense a solid foundation upon which to build standards which shall lead to greater personal and civic efficiency.

Today all youth have a right to demand an elementary knowledge of the *principles* of science, including mechanics, electricity and chemistry. They have a right to ask for well-balanced bodies as well as minds, and to be put in sight of a path which will lead to a useful life, and given the first set of tools with which to work, diverse as life's paths are diverse.

It is with this thought of higher personal efficiency that those who are advocating the study of home economics or home science wish to see it placed in every school in this country. Just what the subject stands for has been suggested in a tentative definition as follows:

"Home economics in its most comprehensive sense is the study of the laws, conditions, principles, and ideals which are concerned on the one hand with man's immediate physical environment, and on the other with his nature as a social being; and is the study especially of the relation between these two factors."

Edward Devine has advocated giving in school and college "the elements of household economics, whether of the kitchen, the living room, or the sleeping room, the cellar or the attic, the front yard or the back yard, the architecture, the decoration, the care of children, the family budget, or even, if you like, the perennial problem of domestic service. These subjects, properly taught, are eminently suited to the development of the very qualities for which the traditional seminary course makes no provision.

"They are neither 'classics' nor 'natural sciences' in the

sense in which these two groups of studies have been used in the battle royal for a chief place in the college curriculum, but rather belong among the logical sciences; that is, those which develop observation and reasoning in a natural and logical order, a group which, represented chiefly by economics, sociology, and politics has been pressing successfully but unostentatiously to a foremost place. I would advocate, therefore, the study of household economics, not with a view to the making of better cooks, waiters, cleaners, and caretakers—though these will come incidentally—but because such study dignifies and invests with a ten-fold interest the routine and drudgery of household affairs; and also because the subject most naturally lends itself completely to the kind of instruction which women most need."

DISCUSSION OF THE TRAINING OF SECONDARY TEACHERS

CHARLES A. McMURRY

I have given the Yearbook a careful reading and am greatly pleased with the whole execution of the plan. I have one line of thought to suggest. The problem of training teachers in both normal schools and universities involves, as one of its chief difficulties, the induction of the young or inexperienced teacher into the difficulties of actual practice. All pure theorists both in normal schools and in universities persistently dodge this problem. Reasons, excuses and explanations are invented, manufactured and multiplied in order to escape from this problem. No coward ever invented more reasons for keeping out of battle, for hiding behind stumps, than the theoretical pedagogue will invent for escaping from the hardships of teaching. There must be deep down in the consciousness of the pure theorist the conviction that his theories will not stand the test, that they will dissipate like mists in the presence of real difficulties. Whether he thinks so or not, everybody else does. Among the rank and file of good teachers, the theorist who declines the smoke of battle, who like Xerxes takes his safe position in some high tower where he can overlook the battle, is regarded with intermingled suspicion and distrust. Superintendents and supervisors who talk glibly and learnedly about philosophical theories, about psychology and method, but leave all the actual handling of children to others are not conscious how empty and farcical their work appears to real teachers.

Such statements as these may seem radical and possibly unjust. But anyone who will take pains to inquire into the facts will soon find that they are just. It is my opinion that no error in education is so deep-seated, fundamental and disastrous as the opinion of the theorist that he can safely trust his conclusions without more or less constant resort to actual practice.

It is this false security which makes so many of our leaders in education blind leaders. It is this which makes such a wide cleft between the great body of actual teachers on the one side and the theorists on the other.

Theory and philosophy of education are just as important as practice; but neither one of them comes to a proper fruitage till they are combined, and it is the combination of them which is the crucial difficulty in education. To be a mere theorist is to be an empty face; to be a mere practician is to be a narrow formalist. To rationally combine them in the actual work of education is one of the greatest achievements of a broad and efficient character. The university as it exists to-day is no proper place for the exhibition of this narrow isolation of theory from practice. The medical school with its clinics and hospitals, the engineering departments with their shops, the agricultural department with its farms and experiment station, the department of architecture and fine art, and all the professional schools are now pre-eminently characterized by the practical side being brought into closest relation with the general-theoretical.

The educational department at a university is distinctly and solely professional. Otherwise it would never have existed. To make it purely theoretical is to put it into contradiction to the present spirit and intent of all professional schools at the university.

Moreover these conclusions are strongly confirmed by the history of educational departments at universities in this country and in Europe.

At the University of Jena, Stoy for nearly forty years maintained a chair of pedagogy and a practice school where he trained in all about 600 teachers for the secondary schools of Germany. Probably no other man of his time in Germany produced so strong an influence both theoretical and practical upon the schools. Ziller did the same kind of theoretical and practical work at Leipzig, and during the last eighteen years Dr. Rein has stood foremost among educators in Germany,

keeping up a practice department for secondary teachers in connection with his lectures in psychology and pedagogy. Earlier still Herbart did the same kind of combined theoretical and practice work for twenty-four years at Königsburg.

These four men, by combining theory with practice in their work at universities, gained a reputation and an influence tenfold greater than that of any mere theorist who lectured on education at a university. There have been dozens of men who have merely lectured on education but their names are in the main unknown to the world. In America the same phenomenon may be observed. Dr. Dewey at the University of Chicago, by combining his lecture work with a practice school, where he met actual difficulties, has gained a leadership in educational thought in America which is most instructive.

The Teachers College at Columbia University and the School of Education at the University of Chicago, by dealing directly with the problems of education as shown in actual school practice, have given an example to universities in this country which promises great things for the future. The characteristic, pre-eminent mark of a first-class teacher in Germany is his recognized and proved ability to instruct young people skillfully. It is to be hoped that the time will come in this country (and will not be too long delayed) when leaders in education, superintendents, supervisors, normal school teachers, professors of pedagogy and psychology and lecturers on education shall first of all win their spurs and establish their right to leadership by applying theory to practice by the actual work of managing and instructing boys and girls skillfully.

By CHARLES B. GILBERT.

Since my work has had to do not with the preliminary training of teachers, but with their employment, and since I am compelled to supplement the work of the training schools, I shall write from the superintendent's point of view and indicate what seems to me some of the most serious lacks in the teachers of secondary schools, which might wholly or partially be remedied by proper preliminary training, and shall leave it to those whose work is the training of teachers to find the means and devise the methods for meeting these needs.

What a stride forward it is that we even think of training secondary teachers! But a few years ago such a suggestion would have consigned its maker to the limbo of hopeless cranks, and would have brought forth the most theatrical of guffaws from the army of secondary teachers, especially those young college graduates just blushing rosy red and standing very erect under the newly acquired title "professor." But the world moves, and from the crushed and discouraged mass of youth who every year drop out from secondary schools, we have gradually ceased to draw comforting reflections upon our own superiority and to boast of the marvelous selecting power of the secondary school. School authorities are demanding that teachers of the secondary grades be teachers as good and as earnest and as sympathetic as the teachers of the elementary grades.

In speaking of the sort of training needed by secondary teachers, I think we may accept without question as fundamental the proposition of Dean Jas. E. Russell of Teachers College, Columbia University, in his paper at the Columbus meeting of the Department of Superintendence, that secondary teachers need to be equipped with *general knowledge, special knowledge, professional knowledge* and *skill in teaching*. I shall simply mention some other needs which may perhaps be taken as amplification of Mr. Russell's four requirements.

My first will certainly come under the head of professional knowledge. The secondary teacher needs to be profoundly versed in the psychology of adolescence. In my judgment this knowledge on the part of the secondary teacher is even more important than the knowledge of the psychology of infancy on the part of the primary teacher. I do not need to enlarge upon this time of storm and stress through which every human being passes before arriving at manhood or womanhood and which so frequently overturns the promises and calculations of childhood. In general it is the period covered by the years of the secondary school. I am wholly confident that a large number, if not the greater part, of failures to succeed in school life at this period are due to the lack of understanding of the needs of youth by the secondary teachers.

The teachers need more than an academic knowledge of the literature of adolescence; they need training in the application of this knowledge to individual cases so that if brought face to face with a class of boys and girls just out of the grammar school, uneasy, embarrassed, awkward, frightened, full of vague ambitions and vaguer antipathies, sentimental, silly—it may be, they can detect individual needs and meet them with good sense and sympathy.

I asked a high-school principal recently what he considered the greatest need of high-school teachers, and he said, "sense." I asked him if he thought that could be secured through training, and he said, "partially." Now this is one of the ways. "Sense" includes knowledge and the ability to apply it to new conditions. The training school can give the prospective secondary teacher a knowledge of the general characteristics of the adolescent period, and proper observation and practice under suitable supervision can turn that knowledge into sense and make it possible for him to be the guide, counselor and friend of the young people. No secondary teacher can be called sensible who can not distinguish awkwardness from dullness, diffidence from sullenness, sensitiveness from haughtiness, uneven development from stupidity. The awkward, freckle-faced

boy uncertain whether he is a child or a man; the gawky, embarrassed girl, poetically described as "standing with reluctant feet where the brook and river meet, womanhood and childhood fleet" need something more than a teacher possessed of broad, general knowledge; academic-professional knowledge; special knowledge of the subjects to be taught; and even skill in imparting. I have known many teachers with all these characteristics who were very poor teachers for the high school simply because they had never been trained to cast a sympathetic eye over the boys and girls placed under their care or to exercise heart power.

These young people need a teacher friend who uses heart as well as head. I have known teachers really sympathetic in nature who held aloof from their pupils, treated them, if not with harshness, at least with rigid severity and confined their labors to the teaching of their subjects, although they had abundance of heart power to pour out in service of the heathen and even in Sunday school, simply because it had never occurred to them that it was part of their duty to use this power for the boys and girls in the high school. Hence, intending secondary teachers should be trained to a sympathetic touch, whose use often makes all the difference between life and death to the young people in school.

Second. Secondary teachers need to be trained to skill in managing classes of students. This really grows out of the former proposition, though I have in mind more particularly the dealing with these classes in the aggregate, applying the personal acquaintance and sympathy to the classroom management. This comes not merely from professional knowledge nor from any special knowledge; it is simply a broader use of "sense" and can only come through practice.

A professional training school for secondary teachers without a school for observation and practice similar to those provided for primary teachers in the ordinary normal school is at most an empty and a hope. The first few years of employment practically settles the professional future of the young teacher,

and to furnish him with experience gained under wise guidance and supervision is to give him an enormous advantage. Hence, the second need is actual experience in class management, gained under supervision.

Third. Professional training should include much which at the first blush seems unnecessary. It should place great emphasis upon the whole scope of the field of education and in particular upon the curriculum, ideals, and methods of primary schools. One of the greatest difficulties which the student passing from department to department or from institution to institution has to meet is the change of standard. The most common complaint among teachers is that the pupils who come to them are not properly prepared. The grammar school teacher complains that the primary teacher has failed adequately to train the pupils; the high-school teachers complain that the grammar schools have failed to fit properly their students for the high school; the college teacher claims that the secondary schools are at fault. All along the line this complaint is continuous and continual, and most of it is rank nonsense. It is simply due to the ignorance of the teacher of the higher grade of the conditions prevailing in the lower and of what he ought to expect.

A change of educational environment means some temporary loss in all cases. The student is embarrassed by his surroundings, awed by the feeling that he belongs to a higher institution, and it takes a little time for him to become accustomed to the new environment so that he can do his best.

I am often surprised at the work presented to me by high-school teachers and received by them from pupils whose work in the grammar schools was thoroughly good. This poor work is due partly to this inevitable loss through change in environment and partly to the failure of the teachers to understand the children and hold them up to their best. Secondary teachers commonly set up standards of their own which are seldom standards of power, but more commonly standards of knowledge, and the classes which come to them always fall short of

this standard, in their judgment, because the tests applied at first do not produce satisfactory results. After a little while the pupils begin to improve, and to show the power they really have; then the secondary teacher comes forward and says, "See this great Babylon which I have built. I took these pupils, knowing nothing, from the grammar schools and now see what they can do." Meanwhile, a considerable number, frequently of the very best students, have been discouraged and frozen out and have left school.

The great loss in numbers during the first year of the high school continually reflects upon the "sense" of the high-school teachers. Training schools could do much to remedy this if they were to acquaint the intending secondary teachers with the real aims of elementary work and impress them with the fact that ability to meet continually new conditions rather than such special knowledge as the secondary teacher can test by an examination is the aim of the primary school and should be also the aim of the secondary school.

This knowledge, moreover, should not be merely theoretical. The intending secondary teachers should observe and practice in elementary schools in order to know the work that boys and girls do and the kind of people that they are.

Further, they should have a view of the whole scope of education in order that their own aims may be right. If they are connected with the public schools they should have a clear view of the economy of the public-school field, of what training citizens means and of the rather insignificant place in the whole training of life the particular specialty which they represent holds.

This leads to the fourth point: the training offered intending secondary teachers should make clear to them their place in the economy of education. This needs to be made particularly clear as our high-school teachers more and more become specialists. A danger besetting the specialist as a teacher is in the fact that the whole world revolves about his specialty. If he is a specialist in bugs, a bug becomes the centre of the uni-

verse, and no human life is complete without a knowledge of bugs. In university fields such exaggeration by the specialists of their own line of work may not only be excusable, it may be useful because their business is to train specialists; but in college work and especially in the work of secondary schools, it is not only absurd but dangerous.

The specialist in the secondary school must be first of all a teacher and a teacher of children and youth, then he may be as thorough a specialist as he can. If he understands the whole scope of education, if he knows what children have been receiving before they come to him, what they are to receive afterward, and is thus through his breadth of mind and his "sense" able to co-operate for the good of the child with the other teachers, he may be as ardent a specialist as he pleases and do no harm; but if he insists that his department is the one to receive all the time and attention, and if because of any unusual advantage, owing to personal vigor or standing in the school, he uses every opportunity to force more work out of the students for his department and for his glorification, then he is not a good teacher no matter how well he may understand the subject or how broad his general knowledge may be.

Beware of the high-school "professor," striving to substitute the teaching of things for the training of youth. There is no more dignified title than that of teacher, and this should be impressed upon the intending secondary teacher in the training school. He should understand that he is not to occupy a professor's chair or sit behind a desk and emit floods of knowledge concerning his specialty upon classes, but that he is to train children and youth for life and to co-operate with other teachers in so doing. As Mr. Russell pointed out in his paper, the high school is the product of forces from below and above, but the secondary teacher (or rather professor) has come from above. His whole notion of teaching is derived usually from a bad model which he observed in college, and he seeks to transfer that to his own field. In many cases he even, save the mark, becomes a lecturer, the very poorest of all types of the teacher.

Instead of arousing young people to activity, he would pour into them his own superior knowledge.

Let then the training schools see to it that the young teacher who comes out is modest, is impressed with the importance of his work as a teacher, realizes that he is co-operating with all the other forces which are educating the child, that he is even to be willing to sacrifice his specialty to the child's general good, that he is not a "professor" and never should want to be, that he should be the sympathetic friend and guide of children; and they will do us a greater service than even that indicated in Mr. Russell's able paper.

To recapitulate then: First, training schools should put special stress upon the knowledge of the psychology of adolescence and upon the application of that knowledge to individual cases. This should be done through observation and practice under supervision. Second, they should seek through the same means to impart that skill in managing classes effectively which we expect from the elementary teachers. Third, they should give knowledge of the scope of education, particularly of the work of the elementary schools, in order that the secondary teacher may measure by correct standards the young people coming to him; and fourth, they should impress upon the intending secondary teacher a sense of his place in the economy of the school system, and should send him out with enthusiasm and sympathy that he may be a guide and helper of youth and not merely a teacher of subjects.

MINUTES OF MEETINGS HELD AT MILWAUKEE

February 27 to March 1, 1905.

(THE PLANKINTON HOTEL.)

Monday, February 27.—Meeting called to order by the President, W. S. Jackman. Grant Karr was appointed Secretary *pro tem*.

Discussion of the education and training of secondary teachers, opened by R. P. Halleck, Louisville, Ky. Discussion was participated in by Sutton, Blair, Doty, L. H. Jones, Groszmann, Carroll, Hill, Kratz, Kirk, Dexter, Cary, Brooks.

Evening session called to order by the President at 8 p. m. and continued till 10 p. m. Full attendance. About one hundred present.

Tuesday, February 28.—Dinner in Colonial Hall, 6 to 8 p. m. This was an enjoyable affair. Two minute speeches by various members.

Wednesday, March 1.—The following business was transacted:

Motion to appoint Auditing Committee. Carried.

Motion to present report in year book. Carried.

Motion that the securing of contract for printing be referred to the President and Secretary of the Society. Carried.

Motion appropriating a sum not to exceed one hundred fifty dollars for postage, etc. Carried. [This was meant to cover the Secretary's expenses.]

Motion that question of incorporation be referred to President and Executive Committee with power to act. Carried.

Motion to become allied with the American Association for the Advancement of Science. Deferred to one year from date.

Discussion as to topics to be taken up, Halleck, Brown, Blair.

The following new active members were elected :

William C. Bagley, State Normal College, Dillon, Mont.

Walter H. Cheever, State Normal School, Milwaukee,
Wis.

Alexander B. Coffey, University of Wisconsin, Madison,
Wis.

Flora J. Cooke, Francis W. Parker School, Chicago, Ill.

Frank W. Cooley, superintendent of schools, Evansville,
Ind.

R. B. Cousins, state superintendent public instruction, Aus-
tin, Texas.

F. E. Doty, state high school inspector, Madison, Wis.

Gertrude Edmund, Lowell Training School, Lowell, Mass.

J. M. Frost, superintendent of schools, Muskegon, Mich.

Wilbur F. Gordy, superintendent of schools, Springfield,
Mass.

Cora M. Hamilton, State Normal School, Macomb, Ill.

Florence Holbrook, Forestville School, Chicago, Ill.

Paul W. Horn, superintendent of schools, Houston, Tex.

Walter Ballou Jacobs, Brown University, Providence, R. I.

Calvin N. Kendall, superintendent of schools, Indianapolis,
Ind.

Arthur N. McCallum, superintendent of schools, Austin,
Texas.

G. R. Muller, superintendent of schools, Binghamton, N. Y.

George D. Pickels, State Normal School, Natchitoches, La.

Rosalie Pollock, supervisor primary grades, Salt Lake City,
Utah.

Homer H. Seerley, president State Normal School, Cedar
Falls, Iowa.

Gerard T. Smith, superintendent of schools, Moline, Ill.

William E. Stark, Ethical Culture School, New York, N. Y.

Henry Suzzallo, Teachers College, New York, N. Y.

J. K. Stableton, superintendent of schools, Bloomington, Ill.

Edward Thorndike, Columbia University, New York, N. Y.

Albert W. Tressler, University of Wisconsin, Madison,
Wis.

Dwight B. Waldo, State Normal School, Kalamazoo, Mich.

Report of Nominating Committee: For President, E. G. Dexter, University of Illinois; for Secretary-treasurer, Manfred J. Holmes, Normal, Ill.; for members of the Executive Committee, C. P. Cary, Madison, Wis., and J. H. Van Sickle, Baltimore, Md.

Moved by Mr. Blair that a committee be appointed to report on new name for the Society. Committee appointed were H. E. Kratz, W. S. Sutton, and F. G. Blair.

The program had been arranged to receive ten-minute reports from the following members:

M. P. E. Groszmann, Plainfield, N. J.—The matter of electives for adolescents.

Elmer W. Walker, State School for the Deaf, Delavan, Wis.—Observations and conclusions relative to imagination among the deaf.

John R. Kirk, Kirksville, Mo.—Library courses in normal schools.

W. T. Carrington, Jefferson City, Mo.—Industrial education in rural communities.

J. Stanley Brown, Joliet, Ill.—The six-year high-school course.

Before these reports had all been given Mr. J. S. Brown moved to have the remainder deferred. Carried.

The remainder of the time of this meeting was spent in the discussion of the Yearbook, chiefly upon that part referring to the relation of practice to the preparation of secondary teachers, J. S. Brown, Darling, McKenny, Farrington, VanSickle, Karr, Blair, Seerley, and others participating.

Meeting adjourned *sine die* at 6 p. m., peace and harmony prevailing.

GRANT KARR, *Secretary pro tem.*,
State Normal School, Oswego, N. Y.

REPORT OF THE SECRETARY

Since becoming Secretary I have tried in various ways to locate the body and discover the spirit of the National Society for the Scientific Study of Education. It is clear that there is a body of capable and earnest men and women in our country who believe in the Society because it can become a valuable agency in several important respects: (1) in promoting the scientific spirit and method in the study of educational problems; (2) in promoting the spirit and securing the values of co-operative fellowship; (3) in securing the stimulating and corrective effects of vigorous and honest but friendly exchange of opinion from different points of view; (4) in publishing from time to time the results of scientific study and views of the status of educational opinion and practice; and (5) in bringing into personal acquaintance a goodly number of the men and women who are working to make individual life and institutions conform to the best ideals that characterize American life.

But it will take time for the Society to reach such standards of effectiveness. It ought to be clear that we are all working on parts or aspects of a great common problem, each with a more or less limited point of view and in his own way; that mutual understanding and appreciation of each other's points of view will illuminate the field for more effective attack of one's own problems, and more intelligent co-operation; that progress in all science and art is a social product, and can best be promoted when those concerned know the results of past experience and the present status and outlook. We need greater solidarity of spirit and organization; and greater mutual intelligence with regard to the problems, the conditions, the methods, and the results of the work of our fellow members. The Yearbook should be made a more effective organ in deter-

mining the character of the Society. Out of the entire membership there ought always to be a few individuals and committees who have work maturing so that there will be plenty of first-class material for the Yearbook some months in advance of the time for publication. Since one function of the Society seems to be the propagation of spirit and ideas, we ought to have a permanent associate membership of several hundred who would be regular readers of the Yearbook.

Can and will *teachers* sustain a society that is dominated by the exactions of scientific spirit and method? Time has not yet proved this in our country at least; but why should not this Society meet its opportunity and acquire such scientific character that the conferring of its membership will be more than a compliment—even an honor?

In harmony with the above conception of what our society ought to be, and the conviction of certain present needs, I have prepared a brief report under the following headings:

1. *What specific lines of study are members now engaged upon?* It is not expected that each member will have at all times a definitely formulated problem. I suppose, too, that those who replied to my question represent a minority of them that are now engaged upon specific, definite problems. It is hoped that a knowledge of what is going on within the membership will lead to correspondence between members who may wish to know more about conditions, method, and results of some of these specific lines of work and study.

2. *How can our meetings be conducted to yield a maximum of value?* There is a rather general opinion that many educational meetings do not yield as great value as they ought and can yield. It ought to be impossible to have such opinion apply to any society for "scientific study." It has seemed to me best to print the replies returned and let the members of the Society draw their own conclusions.

3. *What is meant by "scientific study of education?"* I have printed the replies to this question also, because in addition to their being of interest and practical value to the Society,

they have a certain historical value as revealing the present status of opinion as to what constitutes a scientific study of education. The variety of the conception is significant.

An extended exposition of the meaning of this phrase by one of the ablest scientific students in the Society will appear in the February (1906) issue of the Yearbook.

SPECIFIC LINES OF STUDY MEMBERS ARE ENGAGED UPON

W. C. BAGLEY, State Normal College, Dillon, Mont.—Ideals as factors in the educational process.

EZRA W. BENEDICT, superintendent of schools, Warrensburgh, N. Y.—The correct sequence of work, in detail, in the grades of the public schools; the correct sequence of the various branches of the curriculum and of the various divisions and subdivisions of each branch.

STRATTON D. BROOKS, supervisor of city schools, Boston, Mass.—Specific industrial education in elementary schools.

J. STANLEY BROWN, superintendent of Township High School, Joliet, Ill.—Six-year course of study for both high and elementary schools.

SARAH C. BROOKS, principal Teachers' Training School, Baltimore, Md.—The problem of the city training school. Self-activity as the fundamental law of development, and its possible manifestations. Next year this work will be put into permanent form, not for scholars, but for mothers and teachers. A set of school readers.

WM. H. BURNHAM, Clark University, Worcester, Mass.—The field of school hygiene, particularly upon matters relating to the hygiene of instruction and the hygiene of the school child.

F. W. DARLING, Chicago Normal School.—A series of school geographies.

LIDA B. EARHART, State Normal School, Whitewater, Wis.—My problem the last four years has been the preparation of courses of study for our training department. With the co-operation of other members of the faculty, I have tried to produce a manual which shall embody the results of recent movements in various lines of education; to make a course of study suited to the children, to our environment, and that shall be a guide and help to the pupil teachers who use it. We have tried to grade it carefully, and where practicable and wise, to correlate the various parts. It is not perfect but it is workable and helpful.

J. M. FROST, superintendent of schools, Muskegan, Mich.—Manual training in the grades.

CORA M. HAMILTON, State Normal School, Macomb, Ill.—The effective relation of the training school to the normal school.

EDGAR L. HEWETT, U. S. National Museum, Washington, D. C.—Ethnic factors in education.

REUBEN POST HALLECK, principal Male High School, Louisville, Ky.—The neural basis of ethics.

JOHN A. KEITH, State Normal School, DeKalb, Ill.—How organize and present psychological truth in a way that shall prove helpful and stimulating to teachers who have not had the opportunity to study psychology. The plan is to find out what difficulties such teachers encounter, group these in such a way as to reveal generic difficulties, and then develop psychological truth that applies to the generic difficulty.

The relation of motor activity to the appearance and development of ideas, from the viewpoint of its relation to schoolroom method.

H. E. KRATZ, superintendent of schools, Calumet, Mich.—A book under way—Studies and Observations in the School Room.

ISABEL LAWRENCE, State Normal School, St. Cloud, Minn.—The social life of children and the early adolescent. This is a woman's problem and the mothers in our state have joined the teachers in an effort to get more light on what should be done.

HERMAN T. LUKENS, State Normal School, California, Pa.—The Fifth School Year, a book in the "Series of School Years," edited by Dr. Noss. Each year is a separate book.

G. W. A. LUCKEY, University of Nebraska, Lincoln, Neb.—The certification of teachers. The school agency for teachers.

FRANK A. MANNY, Ethical Culture School, New York.—Discipline in its larger aspects, somewhat of a study of school ethics.

The relation of productive manual industry to education and especially to the school.

FRANK M. McMURRY, Teachers College, Columbia University.—Right things for study and teaching children how to study.

M. V. O'SHEA, University of Wisconsin.—Several studies going forward dealing with aspects of mental development; a volume in the press treating of motor development; another study on social impulses and social development is about complete. "The subject in which I am most actively interested now, however, is linguistic development. I have been gathering data on this subject for the last ten years and am now organizing and interpreting these."

G. D. PICKELS, State Normal School, Natchitoches, La.—General thesis, education is adaptation to environment, and may be treated as a process and as a result. It changes both as to matter and method, whenever environment changes.

A volume, *The Principles of Teaching*, is well advanced.

STUART H. ROWE, Brooklyn Training School for Teachers, Brooklyn, N. Y.—How applications of the "formal steps" to actual teaching are to be reconciled with spontaneity and lack of formalism in instruction.

MYRON T. SCUDDER, State Normal School, New Paltz, N. Y.—Student participation in school government. A school city has been in active operation in the New Paltz Normal School for five and a half years.

H. H. SEERLEY, State Normal School, Cedar Falls, Ia.—Normal school organization and management.

DAVID E. SMITH, Columbia University.—The history of arithmetic.

DAVID S. SNEDDEN, Leland Stanford Junior University, Stanford University, Calif.—A theory of pedagogical (as opposed to logical) method of organizing the subject-matter of the elementary school.

The problem of social education.

Purposes and methods in secondary education.

Foundations of method in the elementary school subjects.

EDWIN D. STARBUCK, Earlham College, Richmond, Ind.—An experimental study on the mental development of children.

The effect of kindergarten instruction on the later development of children.

The growth of the idea of God.

The content of religion.

EDWARD L. THORNDIKE, Columbia University.—Heredity; mental relationships; animal psychology; school expenditures; the causes of leaving school, etc.

CHARLES H. THURBER, Boston, Mass.—The social evolution of the child.

E. W. WALKER, superintendent of School for the Deaf, Delavan, Wis.—A study of imagination, especially among the deaf.

SARAH J. WALTER, Hampton Institute, Hampton, Va.—Training of Hampton students to go out as teachers of the respective races represented.

DWIGHT B. WALDO, State Normal School, Kalamazoo, Mich.—Course of study for the elementary school.

L. E. WOLFE, superintendent of schools, San Antonio, Texas.—The public school system and solidarity of society.

CONDUCT OF MEETINGS

EZRA W. BENEDICT.—It should be understood that most of the discussion of a given subject is to be by those only who have carefully prepared themselves to discuss a particular phase or phases thereof. A limited number of exceptions should be allowed; but these, as well as the chief participants, should be confined within a strict time limit. To enable the Secretary to arrange a satisfactory program, chief participants should notify him before the meeting, of their intentions to enter the main discussion. If they should distribute at the time of the discussion, printed or typewritten slips outlining their discussion, no doubt it would contribute to a more thorough understanding of the same.

No discussion of members' special topics should be permitted before the Society until they have submitted theses to the Executive Committee and their theses have received the approval of a majority of that committee.

STRATTON D. BROOKS.—Five minute limit on specific questions.

J. STANLEY BROWN.—I think a brief paper containing a brief, pointed summary forms the best basis for discussion. Chairman ought to hold speakers to points under discussion.

SARAH C. BROOKS.—The central theme or striking feature of a paper should be considered, the members held to that one theme until the juice

is extracted, at least. It seems to me that we should "speak to the question" and have that question worth while when we drop our work and go hundreds of miles to attend a meeting.

WM. H. BURNHAM.—I think that in the educational meetings of our Society it would be desirable always to have a paper or report presenting a solid nucleus of important facts and that in order to be profitable the discussions should concern such papers.

EDGAR L. HEWETT.—After the usage of the American Association for the Advancement of Science.

REUBEN POST HALLECK.—The chairman should declare "out of order" all discussion which is foreign to the paper or point discussed. It should be borne in mind that the discussion at the meetings is the very least important work of the Society.

JOHN A. KEITH.—The writers of the papers should be present and have their papers reduced to the form of definite theses which they stand ready to defend. Certain persons should be asked to speak to certain theses and then the discussion should be open to all.

H. E. KRATZ.—Discussions should be held down to the subject under investigation.

FRANK A. MANNY.—In answer to question four, it seems to me that the Society has become so large that it is difficult to carry on discussion. . . . Certainly no person should be permitted to present papers of the nature of whose work we are not certain. The material they furnish may be valuable but it certainly should be passed upon first by some responsible person.

F. M. McMURRY.—Pre-supposing a printed article as the basis of discussion, I would suggest (a) that the chairman, or some other person appointed, furnish a carefully prepared set of theses drawn from the printed article; (b) that these theses first be considered by the members of the Society present to see if they contain all the topics wanted for discussion. Different additions could in this way be agreed upon. (c) The theses should then be taken up in order and each one be discussed without reference to the others for the time being. The chairman should either control the discussion, summarizing now and then, calling people to order, abridging discussion, and so on, as seems best; or he should appoint some one to do it, this person not being the writer of the article. The latter would have enough to do simply meeting various objections, etc.

M. V. O'SHEA.—I have often expressed my views to the effect that our Society should be limited to a relatively small number of persons, and then definite problems should be set for discussion at each meeting, every member having freedom to take a hand whenever he chose. The thing likely to prove most disadvantageous in our work is the presence of a general audience which is certain to prevent close and critical discussion. A general audience always leads to general and emotional discussions.

DAVID E. SMITH.—The world seems to have evolved, thus far, nothing better than a set paper, with someone to represent the other side of the argument advanced by the speaker, followed by questions.

DAVID S. SNEDDEN.—Publication of study, as now; appointment, in advance, of certain leaders of discussion, who will read their main points; voluntary discussion, in which the speaker will be urged first to clearly state the point, thesis, or principle which he intends to discuss; and in some cases, the privilege of the principal leader of replying to each discussion as it is up.

L. E. WOLFE.—It has often seemed to me that we could secure better results in our discussions if the discussions were confined more rigidly to a given point at a given time.

WHAT IS MEANT BY A "SCIENTIFIC STUDY OF EDUCATION"?

EZRA W. BENEDICT.—Scientific study of any subject is, according to my conception, a careful examination, uninfluenced by any previously conceived bias or prejudice on the part of the examiner, of the facts, principles and laws appertaining to that subject, the purpose being to discover the truth about it. . . . For the scientific study of an educational problem, the first thing in order is the statement of the problem, in brief and in full. Consideration of all the conditions likely to affect the solution of the problem must follow. The historical aspects of the question cannot be neglected, including attention to the efforts that have been made by others to solve the problem. All education, in the sense in which we use the term, has to do, in the last analysis, with changes in nervous matter and its related mind. Hence any method of studying an educational problem must be deemed defective and not strictly scientific which fails to take into account the laws of mind and nervous matter as furnishing the ultimate basis for the settlement of every such problem.

J. STANLEY BROWN.—(1) A study of some problem so intensively as to reveal greatest weakness in current treatment. (2) Experimentation with a view to discovering a better treatment of the problem. (3) Comparison of results. (4) Abstraction of needless things in solution of problem. (5) Deduction including only essential things.

SARAH C. BROOKS.—I don't know how to answer your question about scientific study, unless it is the inductive tendency of grappling a subject and considering it in every available light, being content with limited results from time to time, but never letting go until light finally dawns. I lose time in the search for books, but that may be due to individual limitations. Then there is the matter of patience over the time required for elaboration, and of how to obtain the required time.

W. H. BURNHAM.—Perhaps my paper in the *Educational Review*, [vol. 26, pp. 236-245], "Education as a University Subject," will give an idea of my answer to this question.

LIDA B. EARHART.—According to my conception a "scientific study of education" is one which seeks to base education upon sound philosophy and psychology; which seeks to find what contributions other sciences have yielded or may be made to yield toward solving the problems of the school-room; which investigates pedagogical procedure not only according to

general laws, but according as it must be determined by the nature of individual minds and the character of the subject-matter.

EDGAR L. HEWETT.—Education is not a "science" in the sense in which that term is ordinarily used. It derives its data from numerous contributory sciences, as anthropology, sociology, psychology, etc. It might be considered a "science of sciences;" but this is open to controversy. Yet clearly pedagogy must deal constantly and should deal intelligently with problems which root in the sciences above named. This seems to me to point the way to a "scientific study of education." When we select the term "scientific" to attach to our Society, we imply *investigation, research*. Accordingly the following classes of problems suggest themselves to me as the legitimate work of our Society.

1. Investigations on the data of contributory sciences with reference to their bearing upon education.
2. Investigations touching the application of accepted facts of these sciences in educational practice.
3. Original research in the contributory sciences with a view to deriving facts bearing upon education.

It has always seemed to me that the investigation of such problems in the scientific spirit by scientific method might go far toward elevating education above the controversial plane.

REUBEN POST HALLECK.—The term "scientific" cannot be used in educational matters in the same way as in a laboratory. Mental effort of greater or less intensity can not be weighed with as much certainty as sugar in a grocery. This Society is expected to perform inductions and draw conclusions from actual experience, not from introspection. Inductions performed from experiments on different molecules of hydrogen and iron will have a certainty that educators can not hope for, since no two classes of pupils and no two educators can ever be the same in the sense that different molecules of hydrogen are the same. Many a scientist would throw up his hands in despair if he was compelled to draw certain conclusions from such variable factors. At the same time, concerted effort among educators ought to disprove many prevalent errors in educational induction.

JOHN A. KEITH.—A scientific study of education is not essentially different from any other scientific study. There must, first of all, be "the widest possible appeal to fact" either as observation or experiment, or both. The facts thus obtained must be explained in terms of their causal connections (by comparison, classification, and analysis), and these causal relations must be synthesized into laws or principles, which have a logical connection. This framework or these hypotheses must be tested by another appeal to fact, which appeal must prove to be a verification of the hypotheses.

The peculiar difficulties are: (a) the framing of a series of problems in such a definite way that the scientific method can be employed; and even if these were framed, (b) educational men are in no position to make

any extensive experiments and at the same time retain their positions, for children are not as insignificant as are plants or animals; (c) superintendents and others are usually too busy to make (especially to record) accurate observations that bear any relation to the pressing problems of education; and (d) the most fatal danger of all, "specialists" approach their work with preconceived theories which they wish to verify.

Education is a distinctly social affair, and its science is not exactly like that of the mathematical or of the natural sciences. Just as people do not want all homes exactly alike, just as they have different ideas about the best methods of industry, about the function of the state and of the church; just so, and for the same reasons, do people differ regarding fundamentals in education. This eternal differing is the source of progress and if one holds to the notion that a science of education that will eternally fix things is either possible or desirable, he is, in my opinion, on the wrong road. Each generation, each community, each teacher, must work it out. Just as soon as the leaders settle a point and others unthinkingly follow their plans, the point is unsettled. It is, after all, the "hungering and thirsting after righteousness," and not the blind following of the commandments, that has the promise in the Beatitudes.

It is possible and desirable to settle some things by a strictly scientific procedure—by observation and experiment, deduction of hypothesis, and verification—all quantitatively. The things that can be thus definitely settled relate chiefly to the mechanical phases of education and to the mechanical aspects of individual activity. The other sort of scientific study, the study that seeks to find out the truth and with this truth to make men better, is not quantitative and is not ultimately definitive. It leads but to a viewpoint apparently in harmony with ideals and existing facts. But both the ideals and the seeming facts change, and hence each man must, in a way, work it out for himself; and so must each community and each generation.

H. E. KRATZ.—"Scientific study" is rather vague. I must admit Dr. Halleck's direction of the discussion in the Atlanta meeting was looking that way. That report from one member in the Milwaukee meeting, concerning some phases of the thinking of blind and deaf children seemed to me another feature of "scientific study."

FRANK A. MANNY.—The college teachers come nearer to the scientific side of education in a narrower sense. I do not believe, however, that those of less pedagogical training should be discouraged from considering that they are making contributions in this field. It is very hard in an organization which includes workers all the way from the superficially descriptive to an intensively explanatory view to appreciate the value of each other's work.

F. M. McMURRY.—By scientific method applied to education, I understand the acceptance of some specific problem or hypothesis as the topic to be investigated. Then such a use of data and logic as will produce conclusions that are convincing to outsiders. The two sources of the data may either be books or children.

M. V. O'SHEA.—I find it impossible in a brief space to give any satisfactory statement of my conception of scientific method in education. The first part of my *Education as Adjustment* is devoted to a treatment of this subject. In brief, scientific method consists in applying some definitely measured standard to the subject you are studying. In education this is extremely difficult, because every problem is so complex, and there are so many factors operating to produce any effect, that we are not likely to get at each one and measure it precisely. This is, however, the work which our scientific society should undertake. I have suggested methods of accomplishing this in Chapters II and III of the book to which I have already referred.

G. D. PICKELS.—Method in the most general sense, involves accumulation of data touching the problem in hand, a careful analysis of the accumulated mass in the light of some preconceived hypothesis, and finally, synthesis of the results of the analysis into a body of co-ordinated truths. The working hypothesis must be based upon such facts as the present state of knowledge affords. Data must be sought in history, in the mental life of children and adults, in current educational practice, in the attitude of the popular mind toward the training of children and the work of the schools, and in the conditions of life and the needs of the individual and the race. No rules of practical value can be given for finding data or analyzing them when found; only the genius of the thinker can determine the mode of procedure. When a doctrine has been formulated, it is necessary to determine its limitations, which lie in other doctrines of greater or less comprehension, and in the conditions under which the formula must be applied. It is finally necessary to test it in practice, in order to ascertain its possibilities for good and evil, according to the manner in which it is applied in practice, and the degree of emphasis laid upon it. This requires patience, and careful comparison of statistical facts. A generation or more may be barely requisite to prove the worth of a given body of doctrine. . . . Every possible theoretical test should be made before there is resort to extensive and enforced use in the schools. Conservatism, which admits improvements cautiously after the fullest proof, should mark every recommendation of the Society.

STUART H. ROWE.—A scientific study of education implies a rational classification of educational phenomena. It implies, therefore, (1) a study of philosophy, psychology, ethics, sociology, physiology and hygiene; (2) the organization of applications of these sciences in the concepts and relationships fundamental to adjustments of the child to his environments. It also implies the theoretical deducing of applications to individual conditions with careful weighing of the effects of conflicting possibilities and the final trial experimentally; but it also includes reasonable experimentation where the original suggestion is due not so much to any conscious deductions from pedagogical theory as to a subconscious or intuitive judgment of the possible efficiency of certain devices or methods, the pedagogical status of which may be more difficult to determine than their efficiency.

MYRON T. SCUDDER.—(1) Gathering data on some given point, (a) by careful, accurate observation, experiment, etc.; (b) or accepting the results of similar work on the part of others who are well known, experienced, careful and competent investigators. (2) Drawing inferences based on the above, subjecting them continually to the test of experience and reviewing them in the light of further research, data, etc. Occasionally hypotheses may be ventured upon, showing possible direction of future research. (3) Stating these results clearly and concisely without bias.

DAVID E. SMITH.—A good balancing of (1) the historical phase. How came this to be as it is? (2) The psychological phase. When is the learner ready for these various subjects, and how are they best presented? (3) The question of utility. What use is the learner to make of this thing? In the broadest sense this includes the culture values, and hence might be called educational values.

DAVID S. SNEDDEN.—Very hard to give. Any systematic and careful study ought to be called scientific, provided the investigator can justify his conclusions. Education may suffer from the over application of methods more adapted to concrete sciences, just as it has suffered from too much "dialectic." Let us not worry too much about method, but seek rather to formulate aims in more specific terms than is now the case. We need much work in this direction, and in the direction of agreeing upon terminology. Why not have a committee on terminology which might annually issue a report on suggested definitions, which might be generally accepted when a majority of members agreed?

EDWIN D. STARBUCK.—(a) Experimental methods should largely supersede questionnaire methods. (b) The methods of description and analysis are legitimate as science but they should dovetail more intimately with the sciences like psychology, biology, sociology, and others, which are closely related to education.

JOSEPH S. TAYLOR.—Science according to my conception is verifiable knowledge, and a scientific method of studying education is a method of observation or experiment conducted in such a way that any student in any part of the world may repeat the observation or experiment, and either confirm or refute the conclusion drawn by a previous student.

So far as possible, in order to be scientific, a study of an educational problem must be quantitative in character. Data should be gathered in such a way as to insure absolute accuracy, and there should be enough of them to justify a broad conclusion.

E. W. WALKER.—I understand that "scientific study of education" means a study of the experiences or processes by which the mind develops. This will naturally be supplemented by the organization of a system which shall in its best form give to the child these experiences and processes when they are once determined.

SARAH J. WALTER.—A special study of special problems by people, (practical workers) who have the time or can take the time to visit, study, and report upon a large number of typical cases. Lastly, a comparative study. Some of the work has been most unsatisfactory because too limited in range.

SOME RECOMMENDATIONS.

In considering the present needs of the Society and the outlook for its greater effectiveness, I am led to make the following suggestions. These may not be the wisest nor the most necessary. Others may be substituted or added. The important thing, however, is that we take such measures as will give the Society greater definiteness and permanence of character, continuity of policy, and effectiveness of work.

The first decade of the Society's history closes with this year. During this time it has stimulated much thought, focusing it upon some of the most vital theoretical and practical educational problems of the period; while at the same time some valuable contributions, both theoretical and practical, have been made to the literature of education. If during the next ten years the Society should make a rigorous study of a few of the great fundamental principles of education, testing and modifying current practice in the light of these principles and publishing results in the Yearbook, it would thereby demonstrate its reason for existing. The synthetic outcome would be a more or less well-organized view of the data of the science of education. These data would furnish standards for testing current practice in instruction, organization and management, administration, and legislation. The suggestions are—

1. That a representative committee be appointed to study and report for the Yearbook what is considered to constitute the best course of academic and professional training for secondary teachers. This is necessary as a logical sequence of the study of the education and training of secondary teachers as presented in the Fourth Yearbook, Part I.

2. That a committee or a member be appointed to study and report how superintendents or principals of high schools can most effectively continue the professional preparation of their teachers. This committee is called for because the post-school preparation is the most important part of a teacher's training, but is too generally neglected.

3. That a committee be appointed to study and report on the data of the science of education as derived from (1) philosophy, (2) psychology, (3) physiology, (4) sociology, (5) ethics, etc. There are many reasons why the National Society should gather up and present in a well-organized whole these data. (This comes from Mr. F. G. Blair.)

4. Two members have suggested that a permanent committee on terminology be selected to report on usage and make recommendations from time to time. The distracting, confusing, and immature state of the nomenclature of psychology and pedagogy entirely justifies such a committee.

5. That representative members or committees be appointed to study and report on the best course of study for the grades in (1) arithmetic, (2) language, (3) geography, and (4) manual training and domestic science.

6. That a committee be appointed to study and set forth the facts concerning the culture or disciplinary value of vocational subjects, and if the facts warrant it, present in cogent terms the reasons for recognizing work done in these lines as college-entrance qualification.

7. That our constitution and by-laws be revised to date.

M. J. HOLMES, *Secretary*.

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OF THE

NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

PART I

ON THE TEACHING OF ENGLISH IN ELEMENTARY AND HIGH SCHOOLS

MEETINGS FOR THE DISCUSSION OF THIS YEARBOOK WILL BE HELD ON MONDAY,
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AND ON WEDNESDAY, FEBRUARY 28, AT 4:00 P. M., IN THE LECTURE ROOM OF THE FIRST CHRISTIAN CHURCH,
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GEORGE P. BROWN

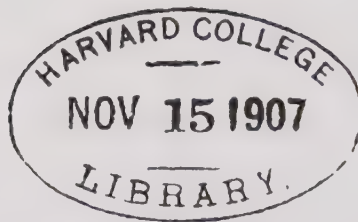
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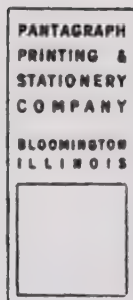
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THE FIFTH YEARBOOK---PART I

ON THE TEACHING OF ENGLISH

I

THE POINT OF VIEW

One who takes life seriously, and so undertakes to discharge an important duty to society, will be unconsciously influenced and in a large measure directed in the performance of that duty by his "view of the world." Is the universe one process of infinite complexity—an organized unity—or is it a conglomerate of misfits at which its Creator and man must be ever tinkering to prevent anarchy? It is especially fitting that the teacher should ask himself such questions, and there is a peculiar fitness that the teacher of English should make his view clear on this matter.

Man's view of the world involves his view of the purpose of his being in the world. Every one must estimate this purpose and answer all similar questions for himself. No individual and no institution can do it for him, provided, always, that he takes life seriously.

It seems as if human thought is settling down to the conviction that the universe is a process composed of an infinite number of inter-related processes. Emerson would call the motor force which organizes these processes into a system, the instinct of the process. Instinctively star-dust evolves into Nebulae; by instinct a Nebula becomes a planetary system; instinctively gravitation supplies the conditions for chemism, and chemism for life; the crowning work of this instinctive process is the coming into being of feeling and of the self-conscious soul. Thus far, objective science seems to trace, in the rough, the process of creation.*

*By virtue of the quite recent discoveries of Dr. M. von Schroen, professor in pathology at the University of Naples, Italy, it is scientifically

Subjective science now takes up the investigation with a view to discover something of the nature of this instinct, or primal cause, and the soul's relation thereto. It discovers that feeling, as sensation of pain and pleasure, evolves into emotion, and that one of its specializations aspires to attain some end, or creates ideals. In response to these desires the soul adds intelligence to direct, and will to persist in the attainment of these desires. That all these phases of activity grow in response to the need of this instinctive potency to attain more fully than it has yet attained, seems to be a legitimate conclusion. The working principle of evolution is that changes come as the need of these changes becomes imperative.

Investigation of the act by which the soul, as intellect, can *judge* and so learn how to direct its aspiration to the attainment of its object, reveals a process so new and wonderful as to place the being who can do this thing far above any other class of beings that has appeared upon the earth. By this new process the instinctive soul of the world comes into consciousness of itself. It can project itself as object, and at the same time identify this object with itself as subject. Such an act no lower order of being can perform. The product is the judgment "I am myself."

The name "I am" was given by the Jews to the Supreme Being; as if they regarded the making of this judgment a symbol of supreme power.

This power to know the self involves the power to know any single attribute of the self by the same process—as "I am

legitimate to speak of a genesis of species in the mineral kingdom, as well as in the kingdoms of plants and animals.

The biological view held hitherto by science admits of no other pro-creative agencies than those manifested in the vegetable and animal cell. But Prof. von Schroen, under the full blaze of scientific test-conditions, makes the discovery that the formation of a crystal proceeds under the sway of the same principles of growth as do the formative processes in the organic world. And he assures us with the seriousness of a savant, that the world around us in its undivided entirety, is a solidary, inter-related, identical unit, animated by the same life impulse, proceeding along the same processes of growth and development, and heading for the same ultimate goal of love, intelligence and power.—Dr. Axel Emil Gibson, *The Dietetic and Hygienic Gazette*, July, 1905.

thinking," in which the ego utters its consciousness that *thinking*, the object in its judgment, is identical with its own act and to that extent the same as the subject. This process of the self in making itself its own object is called by the philosophers "subject-object."

This objectification of the self and its return enriched is the process and the only process by which knowledge is accumulated, and so the power to direct the aspiration in the pursuit of that to which it aspires is gained. Man early formed the judgment, "I am thinking," but it would remain a merely analytic judgment until the act returned enriched by some addition, such as *that the earth is a sphere*. Such an addition makes the synthetic judgment and is the sole instrument by which the soul's knowledge is augmented.

It is this instinctively judging self, considered apart as a distinct phase of the ego's activity, which is called self-consciousness. In the act of forming a judgment it ever separates into subject and object, and at the same time identifies the subject with the object. In this act the self is both subject and object. Every completed judgment begins with the thinker or self and is completed when its other self, the object, is identified with the subject. Some one has said (Dr. Harris, I think,) that in each stage of the process of evolution of the world, this active instinct has been striving "to look itself in the face." This is attained in man.

Now, from this investigation, it appears inevitable—

1. That all of one's knowledge is brought into existence by himself. It is knowledge when it conforms, is consistent with, the experience of others and with his own experience. He creates many predicates for his judgments which are not knowledge, e. g., in his dreams and flights of fancy. His imagination is more apt to supply predicates that are true. His senses are his principal sources of knowledge until he attains the age of reason.

2. There is cumulative evidence as well as instinctive faith that there is a correspondence between the processes in the ex-

ternal world—the macrocosm—and those of our own consciousness—our microcosm—which we instinctively act upon and live by.

3. Modern science proclaims that the external world is a reality which man recreates to the extent that he knows it. The soul, like Kepler, the astronomer, is “thinking God’s thought after him.” The inference is irresistible that he does it by a similar method.

Man desires to know the truth, and the purpose of his intellectual life is to discover the way and direct his steps in the pursuit of it. This non-materialistic view of the external world is a hard doctrine for the mass of mankind, but the recent discoveries of physical science seem to establish the fact that there is no dead matter in the world; that matter is like thought in that both are processes or phases of activity; they differ in that one is a different form of activity from the other.

This cycle of Source, Separation, and Return, which man discovers in his own thought, has many correspondencies in the processes of the natural world. From its source in the ocean the stream rises in vapor, falls upon the earth and returns again to the sea. From the seed comes the plant, which produces again the seed. Morning rises into day, sinks in the west, and rises again in the east.

The solar system rises from star-dust and is to pass on into star-dust again. Everything in nature moves in cycles or in arcs of cycles. This has a startling significance.

Again, in the world of man we find similar correspondencies:

In the American government the power is in the people collectively; they embody it in a chosen administration and at stated periods it returns again to the people. In the court of justice the deed which the individual citizen has uttered is made to return upon the doer.

In institutional history we can find this principle of separation and return ever active. This is especially true in literature. Original Source, Separation, and Return, are the found-

ation process from which every great literary creation grows. It is found—expressed or implied—in every system of religious thought that man has constructed.

Man is coming now to the conviction that the Absolute Cycle from which all minor processes spring, is the Absolute Ego or Person; the objectified system of the processes of Nature; and the return from this separation to the source through man, the image of his Creator, who is to become "perfect as his Father in heaven is perfect."

Now the interesting fact to be inferred—by what appears to be a scientific procedure — from the acknowledged facts above set forth, is that the human soul is the active agency by which the cycle of the universe is to be finally completed. Man is to become identified with God by thinking his thought, willing his will, and thus achieving his love. To love with a divine love is the highest aspiration conceivable to man.

God has created man, by this long process of evolution, with power to re-create God in some measure and in an infinitely increasing measure as he advances in his evolution, by loving, willing, and thinking, what is God's love, and will, and thought. It is thus that he shall become one with the Father, as was taught by Jesus of Nazareth.

From such a view of the world as is outlined above metaphysics disappears and an enlarged psychology takes its place; a psychology that includes nature and God in its scope.

Metaphysics has been thought to deal with the true reality, while physics, including psychology, concerned itself with the phenomenal, the mere appearance (illusion) of the reality. But God, the world, and man are all one psychical process, no arc of which is any more illusion than another. Since man knows only what he creates or re-creates, every science and every object which man knows is a psychological process. God actualizes his psychical processes. Man with his present limited powers can only realize his. But man can actualize his own process to some degree for he can create a form of government that goes on actualizing itself in states and in small communities.

But here opens up a line of thought which is foreign to the purpose of this writing.

We repeat that the Absolute Psyche is identical with the limited psyche, in some degree, in every object of nature and in every human soul. It is the function of education and especially of school education to recognize in the child the possibility of a continuous growth in this identity and to promote it in every way that is open to the school.

It is by the copious inflow of the soul of the universe into the soul of the child through avenues which it is possible for the school to open, that his life becomes in a larger measure one with the soul of the universe in love, in knowledge, and in will. Growth toward manhood is not dependent, in America, upon the unconscious working of the principle of the survival of the fittest, or natural selection, but it has become the conscious purpose of the various institutions of society, and especially of the home and the school. The church is awaking to the conviction that the new view of the world opened up by the discovery of the evolutionary process of creation is a call to new methods and different material for the religious education of the children. We are all coming to see that there is no gulf between secular and religious instruction; but that both have the common purpose of making the great love of the universe prevail in the hearts and purposes of men by man's thinking His thought, the true, expressed in nature and in the lives of men, and by willing His will in our deeds of justice, mercy, and loving kindness.

"But," it is objected, "You are shattering the foundations of thought, rock-ribbed and ancient as Greek philosophy. To re-construct life upon such a basis, and to so interpret the purpose of instruction, would require that we reconstruct our system of thought, which we have spent our lives in building up. You are confounding metaphysics with psychology, the religious with the secular, the science of nature and natural religion with religion."

Well, this discussion is not addressed to such objectors.

Gallileo, Copernicus, Luther, Socrates, Darwin, Jesus of Nazareth, were crucified in fact or in spirit by such objectors. They are joined to their idols; let them alone. Evolution has opened up a new view of the mutual relations of God, man, and the world.

"New occasions teach new duties."

Life has both its fluid and its congealed strata. Both are necessary. I have often thought that man fortunate who remained hospitable to new fundamental ideas. Evolution seems to be a complex of progressive, stationary, and retrogressive processes. They will all be found at every step in its advance. My purpose is to seek such light from evolution as will illuminate the path to a more natural and rational method of teaching the children.

The truth seems to be that evolution is fast removing some of the foundation stones of the long-established process of thought in more than one department of life, and is putting supports of more modern material in their places. So far no danger of a cataclysm has become apparent. The danger threatening society today comes from the failure in former years to make regnant in the souls of the children the processes which this new view of the world declares to be imperative.

GENETIC PSYCHOLOGY

Genetic psychology is founded on the theory of Evolution. Man in his prenatal growth, it is reported, conforms to this theory by passing through a series of forms of the animal kingdom. He enters upon his postnatal career in human form, and with psychical potentialities of great promise but at the zero point of attainment. The symbol of a blank sheet upon which others may write his life will no longer serve. He himself is to do the writing. He is potentially a self-directive being, but his infant self-activity is less than that of the animal world from which he has emerged. The greater his possibilities of attainment in the scale of being, the longer is his period of helpless infancy; as if the soul of the

universe had provided that man, the culminating arc of the great cycle of creation, shall lie fallow for a time in the beginning of his career, while the energies are organizing for the mighty work they are to do.

He has inherited tendencies of body and predisposition of soul from his forbears, human and prehuman, which will prove lines of least resistance in his instinctive efforts to attain. Some of these lead upward, some downward. But history and experience prove that he may be early inoculated with other germs which will draw the nutriment from these inheritances and so slough them off from the process of growth. The same principle acts in the lower world under the greater limitations of that world. This invariable law of growth is the basis of the teacher's hope; more than that, it is the basis of his firm reliance on the effectiveness of education in redeeming the soul from its degenerating tendencies and in promoting its advancement toward manhood.

The child, after birth, enters upon a series of psychical changes which repeat the psychical changes in the growth of the race in a way corresponding to the physical changes in the prenatal growth of the body. The force and influence of these inheritances may be, and often have been, overestimated. But they have force and influence all the same, and when interpreted in a large way are of commanding importance in determining the matter and method of procedure in different stages of the child's development.

I. The feeling instinct was the commanding activity in the infancy of the race; it is the commanding activity in the early years of childhood. Indeed is it the commanding activity in every stage of life. Pleasure, happiness, joy, love, stimulate and foster the growth of the soul; painful emotions retard it. When the pleasurable affections attach themselves most strongly and most actively to the educative process which the school seeks to foster, the soul advances most rapidly in its achievement of character. The child enters life with a song in its heart and

on its lips, also, unless there is an abnormal condition of the body.

It is the contention of the writer that feeling, in some of its forms, is the controlling activity in the lives of men, as Divine Love is the commanding activity of the universe.

2. Another process, inherited from the remotest ancestors of the child, is memory—"the thread," as Emerson remarks, "upon which the beads of life are strung"—the matrix or cement which holds the experiences of the past in close contact with the consciousness of the present. It has been ever present on the evolutionary journey from star-dust to child, being the force of gravity which holds the universe together and becoming conscious first as feeling. The child's memory is of that rugged, wild, tenacious sort, holding a multitude of unrelated facts together, without purpose and without effort, provided only that joy attends upon the act. This immense native power may be dissipated by the unwise influence of the home and the school: memory, without which there were no connected life, and no possibility of growth.

3. Besides these endowments the child has brought with him from below the instinct of imitation, without whose introduction to the new world which he has entered he would be in sore distress; but which, continuing too long as guide, works irreparable injury by arresting the growth of the child. Mechanism is an essential adjunct to development, but imitation is too primitive a form to be fostered after the power of personal initiative has begun to bud. It is ever active in the life of man without any fostering care.

4. The imagination of the normal child overtops every other distinctively human instinct. It is the creative instinct of the infant soul, running wild as it once did in his ancestors. It is his richest inheritance and should be given a free rein. It calls for direction but its repression is a fatal mistake.

The affections must run parallel with all intellectual activities, and these latter must be employed in directing the pursuit of educative desires. Giving direction to the realization of

desires was the original and yet remains the normal function of the intellect.

The will naturally follows the stimulus of the desires in kindergarten and primary training. The child knows no distinction between feeling, will, and intellect, but the teacher needs to make such in her own thought, in determining the processes she will use.

5. Later, especially in boys, there comes a time when imagination and the benevolent affections yield their leadership to a sterner motive, which may be characterized roughly as love of power. This strikes the normal boy at about the age of ten. The body is compact and strong and the intellect is alert in the achievements of physical prowess.

This condition seems to be an inheritance from a remote ancestry, when savage and brutal man combined in tribes for defense against enemies, or for aggressive warfare. This stage of evolution probably continued for many ages. It was the boy epoch in the growth of the race, which fact would seem to justify its occurrence in the life of the modern boy. It was not in individual strife so much as in tribal struggle under the law of the survival of the fittest, that man developed toward manhood in this epoch. We seem to be far at sea and widely variant in our conclusions as to the natural method of solving the educational problems of this stage. But two things are suggestive:

(a) The physical and mental vigor of the child suggests that this is a period for driving him hard in mastering the mechanics of knowledge.

(b) His ideals are not lofty but he has an active appreciation of justice and loves conflict and victory. His Quixotic disposition and impulses open the way to the ingenious teacher to set him battling with the giants that beset his path.

6. Finally comes the transition from boyhood and girlhood to manhood and womanhood; a period, until recently, not differentiated from others in the onward progress of life. Dr. G. Stanley Hall's great work, *Adolescence*, has revealed much

that was formerly unknown, and awakened a widespread conviction of the supreme importance of further study of the problems therein suggested.

I have called attention to some of the guideposts and danger signals along the way of education from infancy to maturity which genetic psychology has set up. They point to the affirmative instruction and training, both in matter and method, required in these different periods of development; and they suggest a rational method of dealing with the negative tendencies toward degeneration involved in the process of evolution.

The purpose of this elaboration of a point of view from which to teach English has been to suggest the need of having some theory of the universe, consistent with the experiences of the human race, by which to guide our course in fitting the young to pursue a rational and inspiring theory and practice of life. This point of view is not a new one to the modern scientist, but most school teachers have not yet seriously studied its requirements in the teaching of the child. The theory of an evolution *which is directed by a purpose* is the central thought of a newer education than that of our grandfathers.

II

GENERAL PRINCIPLES AND SUGGESTIONS

1. The teacher of English or of any other subject, whether in the kindergarten or in other grades, will need to take account of the psychic endowments of the child. Imitation, memory, and imagination, the child's instinctive soul activities of immense power, have been gathering and putting into form the experiences of life since the first dawn of consciousness. With this accumulation as a basis, the school seeks to create an environment which shall direct these native impulses along lines that shall be in harmony with the natural growth of body and soul, and shall at the same time put order and system, in some measure, into the processes of this growth.

2. The governing principles of the *survival of the fittest* and of *unconscious selection*, under whose direction the race slowly advanced through long ages, seem to have worked regardless of the great waste of energy that attended the slow progress in the development of the soul. The school is these unconscious processes now evolved into self-consciousness, and it undertakes to direct the growth of the child toward the goal of his own self-consciousness by a shorter and more economical route. Adopting the figure of Socrates, the school is the midwife presiding over the birth of the child's soul. It is not until recently, and even now only in spots, that the school has risen to this consciousness of its function.

The instinct of the vegetable world has recently become conscious in the florist and the horticulturist; and so too has the instinct of the animal world as manifest in the higher attainments of animal life made possible by man's knowledge. It was not long ago that Rousseau declared that unconscious nature was the only fit teacher of the child, and the educated class has been proclaiming with approval his pedagogical doctrine for a hundred years. Man has only recently discovered that he himself is the instinct of the world awakened to the consciousness of his divine office in advancing creation.

3. The imaginative instinct of the child is poetical. Imitation and memory are prosaic. In English, as well as in everything else, the soul should feed upon the best that it can assimilate. Literature is found in every grade of English composition from Mother Goose to Shakespeare. The artistic sense belongs to the emotions and is prominently active from the beginning of conscious life. Give in every grade the best that the stage of development will receive gladly. But it is of supreme importance that in attempting to obey this injunction there shall be no attempt to force the growth of a literary taste. The child can appreciate beyond its power to think, but not far beyond. It is a common error to mistake the influence of the teacher's musical voice and speaking countenance, and sympathetic gesture upon the child, for appreciation of the

English. The story of *The Old Dog Bowser*, has many applications throughout the journey of life.

4. Another injunction of nearly equal importance is that we leave food which is palatable to nourish the soul after its own fashion. Not that its impression is to be left to fade away; by no means. Opportunities must be given it to express itself in some other connection. But having planted the seed wait for the fruitage; not neglecting, in the meantime, the dew and the rain, and the fertilization of the soil.

5. Another too prevalent error is to confound *thoroughness* with *exhaustiveness*. Children cannot study anything exhaustively; but what is worth doing should be done thoroughly. It is worth while that the child shall live as much as possible in an atmosphere of good English. This means the reading, listening to, and reciting of good literature, and an abundance of it. There should be a wide range of choice, also. A *feeling* for literature is an endowment common to all. A *form* attractive to one may repel another. What is congenial—gives pleasure—should not be dismissed until its impression has been made. But the teacher will not gauge the impression to be made upon the child by the impression made upon himself. Our ability to put ourselves in the place of the child will be the measure of our success.

6. The last suggestion, and one of commanding importance, is that the English studies at every stage shall be valued by the teacher chiefly for their influence in forming ideals of life. The sordid aspect of life is impressed upon the child at every turn. It is everywhere in evidence except in comparatively few homes. The child is not having a fair chance. If the school does not help him to one there is little hope that our present "hot pace" in moral degeneration, especially in the economic world, will be arrested in the near future.

The purpose of this writing is to set forth the governing ideas which should determine the teacher's practice in giving instruction and training in English in the elementary and high schools. The details of the process are not attempted and

would be of little value to the experienced teacher. A handbook of practice for each grade, for teachers of little experience, would be necessary to fully complete the writer's idea of a pedagogical discussion of the subject.

English is the life of the people who use the English tongue, in so far as that life is uttered in our language. It is one of the infinite variety of forms in which the life of the world utters itself. English is a live thing, therefore; many of our failures in teaching it arise from presenting it as a dead thing. Life is its substance, its meaning, and the word is its form. The meaning can be no more separated from the word than the vital force can be separated from the tree. When the life has gone out of the word it is no longer a word.

Language grows in the child, as in the race, from inarticulate to articulate sounds. The first utterance of the child is through musical tones, and is an expression of love; the joy of living. Until he enters school, the words he uses are for the most part, what Dr. Earle calls "presentive words," as distinguished from the symbolic. The meaning and the form are one and the same to the child. He, like the lowest savages, cannot conceive of a thing that is called by a strange name. Alfred Russell Wallace tells of the natives of the Malay Archipelago who would not believe that there could be any country called "England." Such a name was too absurd. "No country could be called that." The same incredulity has been noticed in children. In his *Philology of the English Tongue* Dr. Earle tells of a six-year-old boy who refused to call his brother, in their play, "Polyhymnia," declaring "nobody couldn't be called that, I'm sure." A polyhymnia was to him a thing unknown and impossible.

Not until the child begins to use graphic signs in expressing meaning does he approach any clear distinction between meaning and its form. So fixed is his habit of sounding every meaning that during the early years of his school life, and sometimes on to old age, he translates the graphic symbol into

a sound-meaning before he can use it. To attach meaning directly to the graphic form is a later acquirement, if it is ever learned. The graphic symbol is to him the sign of the meaning as *sounded*. Considerable analytic power must be acquired before the distinction between the *sound* and its meaning can be made. This conscious distinction between sign and thing signified, in learning English, is often attempted too early in even our best schools.

The early introduction of graphic English, so prevalent in all good schools, first by the teacher on the blackboard before the children, and later by the children themselves, is one of the most valuable improvements in the work in English in the primary grades during the last century. Like all other distinctions in the child's progress in knowledge this one, between meaning and form, is long in the sub-consciousness before it rises above the threshold.

The mastery of the graphic and the sound elements of words is the mechanical demand of the early period of English teaching. Without such mastery progress is slow and uninteresting. Much depends upon the method pursued. The key to the natural and most effective method is found in the way the child has learned to talk before entering school. During that period, the meaning has always preceded or accompanied the expression. The school seeks to teach expression by suggesting an interesting meaning which the child deems it worth while to express. While the meaning has the major emphasis in all teaching of English, there are certain drill exercises for the mastery of graphic and sound forms that must be practiced with systematic regularity. But these drill exercises should never be regarded as lessons in English. As well might the carpenter say that the making or repairing of his tools belongs to the process of building a house. The study of the construction of words can be made as interesting as any other, but it should never be mistaken for a study of English. And yet the use of the word in English should not be ignored while teaching its form.

The sound-form must be mastered as the foundation for oral expression, and the graphic form for proper eye-symbols of meanings. Power to spell words by sounds and by letters (analysis), and to construct words in oral and written composition (synthesis), is a necessary part of the child's equipment for learning English. It is a mistake to assume that this can be done incidentally. It is as great a mistake, in the lower grades, to interrupt him in his attempts to express his own English, by too exacting demands for correct forms, oral or graphic. If his form grows *pari passu* with his power to think it will best correspond with his natural growth in other things.

Along with this mastery of forms and as the commanding activity in it, are—

Interpretations of English (reading).

Conversations (oral composition).

Written compositions.

Much reading is the source of power in interpreting the printed page. Conversation and oral reproduction by the pupil of things learned cultivate the power of personal initiative and alertness in thinking. Written composition gives the child practice in original thought and in its expression by the long circuit through the fingers.

This elementary field is the one to which the injunction to learn by doing is especially applicable. It has been neglected and often wholly ignored in the practice of the past, and the poor results in English in the schools are largely due to this neglect.

"As the twig is bent the tree inclines" is especially applicable to the teaching of English.

The leading mind-forming activity of this elementary period may be characterized as sub-conscious synthesis. It should be continued until the child begins to feel an interest in analyzing things.

The psychic activities of synthesis and analysis involved in the study of English from the primary grades to the end of the high-school course, may be roughly outlined as follows:

1. Unconscious synthesis and analysis during the first six grades, with the analytic factor slowly rising above the threshold of consciousness.

2. The movement during the last two years of the grammar school and the first year of the high school is analysis as the leading conscious activity with a growing consciousness of synthesis or unity of the parts into an organic whole. An organized unity may be apprehended years before it is comprehended.

3. The third phase of growth, which it is the function of the high school to nourish, gives the major emphasis to conscious synthesis, and makes conscious analysis auxiliary to this end. The result sought is a comprehended organized unity not only of the subjects studied but of all studies into a view of the universe as an organic unity. A rational view of the world is impossible to one who cannot see the unity of all its elements, both physical and spiritual.

I have said that the high school should *nourish* this growth. No one is educated until he has attained it. How far we are from its attainment may be illustrated by the answer given by one of America's literary scholars to the following question, sent out by the National Council of Education:

"What changes in existing conditions will tend to make our schools (elementary, secondary, and higher) more effective in preparing the pupils for real social efficiency?"

He answers the question thus:

1. "Simplified spelling."
2. "Simplified spelling."
3. "Simplified spelling."
4. "More drill in arithmetical computations and less puzzling problems."

This gentleman is the maker and the publisher of many excellent books which take a larger view of our needs, and he ranks among the men whom the National Council deem it important to consult upon this fundamental question, and they publish this contribution of his to the literature of education.

III

METHOD IN PRIMARY GRADES

A modern method of teaching ought to look for its foundation purpose and principles in the modern view of the world. It has been assumed in our introduction that this purpose is to make the great Love active in the universe, prevail in the hearts and purposes of men through thinking His thought—the true in nature and in the lives of men—and by willing His will in their deeds of justice, of mercy, and of loving kindness.

The child in the kindergarten and the primary school is very close to the animal world—to nature. Words are not, in the present stage of the development of the race, his inheritance. But he has a multitude of other inherited ways of expressing himself. These he brings with him to the school, and the school should make free use of them. These strong, wild psychical powers of imitation, imagination, and memory which are clamoring for exercise and expression must not be repressed, but, rather, directed in ways that will give a variety of interesting experiences. He is to work *consciously* to attain a purpose under the prompting of a *desire*. The school's function is to supply the environment favorable to the awakening of the desire. This describes the spirit of the directive influence of the kindergarten, and the primary school; indeed, of all elementary and high schools. The manner of administering this spirit is the province of the teacher, solely. Her speech, manner, and voice are three elements of the child's environment of commanding influence. The order in which these elements are named suggests the order of their increasing influence. A musical and sympathetic voice, when the spirit of the teacher is expressed by it, is of the first importance; but a sweet spirit will shine from the eyes, and find utterance in the words and tones even when both are inadequate. But happy is the primary teacher who has a sympathetic, musical and cultivated voice.

The main reliance for the education of these children is on the conversation between children and teacher, hence the need that the teacher talk well. Much talking on themes of interest, which lead to the coming in of educative ideas and feelings, is the method *par excellence* for opening to the young child the way to the learning of English. At the beginning nothing is to be uttered for the sake of the form, but only for the sense. When the right word is not at hand, the teacher quietly suggests it or the child uses some of his other modes of utterance.

Let us ever remember that words are not instinctive to the child, like gestures and tones of voice, and that the words are to be improved only so rapidly as it can be done without obstructing the interested flow of the child's thought and feeling. Imitation and memory are strong, and these are the teacher's grounds for hope that the worst faults of the home training may disappear in time. When the atmosphere of the school room is redolent with good feeling and the teacher has skill to attach the thing to be learned to some affection or desire, a single presentation is often sufficient to establish it.

Little by little, throughout the kindergarten and the first grade of school, the child acquires some freedom in conversation in fields where educative germs are numerous. Young children do not grow in knowledge by the acquisition of logically consecutive ideas. In many homes these germs are few. The child's knowledge grows in spots, for the most part. Logical sequence is not felt nor desired. Their first acquisitions are a mass of unrelated facts, especially is this true of their school knowledge. In the home the, at first, isolated facts have widened their respective horizons until they have touched each other and some relation has become established. The primary grades can do much to encourage the mind to seek to connect its ideas, by judiciously emphasizing those which most readily fall into a connected whole. The teacher must work with the conviction that in the sub-consciousness of the child are the germs of all the emotional, moral, and intellectual activities

that are to be realized in the man. She must not underestimate his ability to appreciate what he has no language to express. There is often a response from the eye while the tongue remains silent.

IMITATION AND MEMORY

Imitation and memory do not need to be strengthened. They are already seizing upon everything to which the interest and affections attach themselves. To select the most fitting matter and work up its presentation to a climax, is the teacher's problem in promoting the acquisition of new ideas.

We have said that imitation is the main reliance. Imitation may have a much wider range than mere mechanical repetition. When we are listening to a story or a song, we are imitating as we follow the presentation of another. In this sense much of human life is imitation. How to make the imitative instinct grow into an initiative activity is the ever present problem for the teacher in every grade. How to make the memory join its mass of facts into a causal sequence, is the ever recurring problem in the cultivation of the intellect.

The evolution of these powers of personal initiative and causal sequence is slow. The art of the teacher is shown by supplying the environment and the exercise that will awaken the germ, and then by waiting for results. There must be no forcing the growth; but we can continue to enrich the soil by much reading and story telling and conversation.

The personal initiative in thinking is most easily aroused by conversations upon stories or other topics in which the children have a lively interest. The personal initiative stimulated by the manual constructions now prevalent in most good primary schools is of another sort, but every kind of personal initiative is helpful to every other kind. Anything that calls for results to be worked out in the child's own way is an exercise in original and self-directed power.

But let it be remembered that all the powers of the child are at bottom one power; all the energies active in the universe are in their essence one energy. This is the characteristic of spirit

as distinguished from a machine. Bearing these things always in mind, we shall avoid any attempt to educate the child in sections. There are no strictly departmental processes of the soul.

IMAGINATION

A free working of the imagination is only possible when there is a feeling of absolute freedom from any unpleasant restraint from without.

This feeling will be in the atmosphere of every school where love reigns. But let us not confuse love with sentimentality, nor freedom with mere animal impulse. Children are to be *trained* to freedom. The instinct to follow impulse is the germ from which must grow the child's impulse to follow reason. The problem is How to avoid the arrest of the sense of liberty in seeking to stimulate the growth of rational freedom. The wild imagination of the child is the inherited germ with which we must begin. How can it be tamed without arresting its growth? It must be done by the silent influences of atmosphere, and soil—the spirit of the school and the material and method employed. If the teacher's eye is riveted upon a course of study separated into weekly or monthly sections, there is absolutely no hope of success. Nor is there any greater hope of success when the teacher seeks to follow the impulsive wanderings of the child.

Too much repression is one cause of the arrest of wholesome growth, and too much license is an equally potent cause. We need to realize at every step in the process of teaching English that young children are poets. They are for the time the things they personate. A little experience in the world of reality forms the basis of a large experience in their world of unreality, their "sposin" world. But this "sposin" world is very close to the loving heart of the universe. It is the realm of that creative activity which finds its fullest utterance only in speech. The supreme joy of creating is felt by the child. His products are crude and irrational when judged by later standards, but to the young child the few combinations of

straight and curved lines in which he embodies these creations are paragons of beauty, and his language is to him exquisite poetry.

The free conversation-method including story-telling, relation of incidents, etc., is the best device of the teacher, who can use it, for avoiding the dangers of this Scylla of license and Charybdis of repression.

Before the child can successfully enter upon English expression through the long circuit of the fingers, he needs to have acquired great facility in the use of the short circuit, through the tongue. In the meantime while working for this facility he can learn the mechanics of the long circuit.

THE MECHANICS

It is not required of this brief outline, which undertakes to show merely the guiding ideas in a scientific procedure in teaching English, to devote much space to the discussion of methods of mastering the mechanics or to methods of procedure in any phase of the work. The changes in the psychical activity of the child from oral to graphic speech is the matter of chief moment. When these are clearly apprehended, the teacher is the best judge of the procedure for the particular school or pupil.

Graphic English is very modern compared with oral speech. It involves a discrimination which primitive man for many ages did not make—the distinction between form and meaning. To this reference has been made above.

Instruction in English should result in the habit, in the high school at least, of seeing the meaning as clearly in the graphic symbol as in the sound symbol. In other words, the learner should be able to interpret the printed page as easily as he can follow the same discourse in oral speech. This may dispense with the service of many of our orators, perhaps, but it will conduce to clearness and stability of thought when men can understand as well what they read as what they hear. The weakness of America today is the inability and, therefore,

the disinclination of the mass of the people to read a serious and logical exposition of any subject. The newspaper is their high water mark in English in respect to both form and substance. The average graduate from the high school and from the college must learn to read after he leaves school.

No doubt there is more than the difference between oral and graphic forms involved in this, but the continued inability to see ideas in graphic forms is the seed of the difficulty. So long as the reader must translate them into oral speech, he has not mastered the art of reading. Oral speech is the language of concrete images. Abstract ideas come in best from the graphic symbol addressed to the eye. We care not for the pronunciation of the word in reading abstract discourse, but chiefly for its visual form.

STORY TELLING

Story telling and story reproduction are the strong reliance of the primary school for training in English. Until recently, story telling has been no part of the primary curriculum. It is now fast becoming the "head-stone of the corner" in our estimate of its importance, but in our practice it lags far behind. This is because the teachers are not good story tellers. It is an art having its definite principles and rules, like others, and requiring much practice under judicious criticism. Our normal schools have not embodied it in their course of training, and have few expert story tellers in their faculties. They have been busy trying to make an adjustment of the matter and method of the established curriculum to the psychical attainments of the children, in so far as they have done anything strictly professional.

The schools must increase their estimate of the importance of training in the use of English in the first six grades. In the first three grades it is practically the sole vocation of the school. Other than manual training, arithmetic is the only subject in the curriculum demanding separate and serious attention. The importance of arithmetic in these first grades

has been greatly overestimated. In them it is solely of the applied variety. This does not exclude the learning of arithmetical tables in the third year—which is a mere memory process. Such tools of knowledge should be mastered while the mechanical memory is strongest.

In the fourth, fifth, and sixth grades the school should advance by slow approaches from the study of the mechanism of the word to that of the sentence. The mechanism of the sentence must be seen, from the start, to be determined by the meaning. This applies not only to the arrangement of words into sentences, but to the inflection of words as well. Difference of meaning requires difference in form or in arrangement of words. As the child's ability to form judgments grows, he is able to understand the mechanism by which these judgments are expressed. But all this preliminary study in these grades of the forms and uses of words in expressing meaning should be oral—study with the teacher. Textbook study and reproduction are too apt to degenerate into rote-memory processes when these lower grades study English from textbooks. Besides, the young student needs to deal with live thoughts active in his own mind, instead of with dead results of another's thinking.

COMPOSITION

Composition, oral and written, must grow as the child's ability to think consecutively grows. The constructing of single sentences to express separate judgments is not composition in the sense in which we use the word in school. It is called, rather, sentence making, and is an important acquisition for facility in composition.

The composition process is one in which personal initiative is the prime requisite. The impulse must be felt as the moving cause of the expression. Unless the pupil composes English oral or written under this impulse it is in no sense creative study. It may be study of the mechanism of the sentence, but it is a very mechanical study of that. If English has been studied, as above suggested, in the grades below, and a similar

process is continued in the fourth, fifth, and sixth grades, the child will have enough ideas pressing for utterance, upon any fitting subject, to furnish the matter for his exercise in composition writing or oral discourse.

Let it always be borne in mind that everything studied in school is a live thing. It is not dead stuff, nor dead results, but a live process in the child's world and should be so regarded. Indeed everything in the world is a process and a process only; so the philosophers and scientists tell us. No other conception is possible if spirit is the creator of the world. There are mechanical processes, but he whose spiritual growth is arrested in these can be nothing more than a machine; and this is the lowest manifestation or utterance of the human spirit. Mechanism is one of the lowest rounds of the ladder by which we rise "From the lowly earth to the vaulted skies." But it is a round of the ladder.

IV

ENGLISH IN THE HIGHER GRAMMAR GRADES

The sentence is the object of study in the second distinct period of English study. This subject also has its sub-conscious and its conscious periods. In the lower grades, the division of the sentence into subject and predicate, the functions of the different parts of speech and of phrases and clauses, the modifications of the meanings of words by inflection, capitals, punctuation, and paragraphing, can all be taught in an incidental way, while the major emphasis is placed upon the meaning. The study of the separate functions of the words is often helpful in mastering the thought expressed. But this is hardly what is meant by the study of English grammar. It is merely building an approach to it. In Latin or German in which inflection determines the relations of words, the knowledge of these is the main purpose of grammar study. But English is almost a grammarless tongue, from this point of view. Its grammar is studied for another and different reason

and should not be attempted earlier than the seventh grade in the best schools.

THE SENTENCE

The sentence is found in every developed language. It has the same essential characteristics in all. It is the verbal expression of a judgment, or thought.

Every judgment involves a *source*, a *separation*, and a *return*. The source is the *subject*; from this the *object* or predicate is separated; and then it *returns* to, or is identified with, the subject. In the conscious act of thinking *I*, the subject, project my *predicate*, the *object*, and then affirm it to be my own by means of the *copula*, as: *I-am-thinking of this matter*. This is the type of all thought. It is by this process that each one creates for himself what he knows. Indeed, is it not by this process that the Absolute Ego has created the Universe, so far as man can fathom that process? The Absolute Source projects nature and man as object which returns to the primal source through man's spiritual identification of himself with the Father by feeling, thinking, and willing what He thinks, feels, and wills—becoming perfect as he is perfect.

This trinity in the judgment reproduces itself in all of the intellectual creations of man. Every ideal of art, or of literature, or of government has *source*, *alienation* and *return* as the constituent elements of its movement, when we study it deeply enough to discover them.

Since the judgment is the unit of human thought, all human knowledge *must* partake of the nature of the judgment. We can conceive of absolute thought only as the human judgment writ large. Man cannot escape this formula in his intellectual processes nor in his products. Whatever he knows he must thus create. His ultimate goal seems to be to identify his thought and life with that of the Absolute.

This has its place in this discussion for the reason that every serious-minded man's view of the world determines in a large way every purposeful act of his conscious life. The serious-

mindful teacher of English has great need of a deep and rational view of man in his relations to the world, for "as the teacher thinketh, so is he, and so is his influence upon the school." This may be and for the most part ought to be a silent influence. Its effectiveness is manifested in the view of life the child has unconsciously acquired.

The process by which judgments are made has been shown above. The sentence is the judgment formed in words. The growth of the sentence in the evolution of the race has kept pace with the growth of the judgment. Clear judgments call for clear statements. The signs of meanings become as complex as the meanings themselves.

The essential parts of a complete sentence are three, corresponding to the three-fold movement in the formation of the judgment, viz.: the subject, the predicate, and the copula. Every judgment has its source in the thinker. "I think," or "see," or "hear," or "believe," etc., is the fundamental proposition of every judgment I form. To express modifications of the returning predicate, calls for words in the sentence used as nouns or pronouns, pure and attributive verbs, adjectives, adverbs, conjunctions, and prepositions. There are six classes of ideas used in the construction of judgments, and they have their corresponding parts of speech in the sentence. More complex thoughts call for phrases and clauses to express some of the more complex ideas or modifications of ideas which cannot be expressed by single words. The study of the relations of the ideas in the judgment, and of the mutual relations and forms of the words necessary to express them is Grammar in the sense in which the subject is here discussed.

The pupil has already learned many of the functions of words, in his efforts to interpret what he reads and in his practice in expressing his own thoughts with clearness and precision. But he is now making a systematic study of the sentence that he may discover the reasons for the rules, as well as the rules themselves, that must be observed in the use of the English

tongue. Prof. Earle says, "The chief instrument of Grammar and the key to grammatical analysis is the doctrine of the Parts of Speech." A doctrine so important ought to receive more than a passing notice even in so brief an outline as this is required to be.

The doctrine of the parts of speech is based upon the function of ideas in forming a judgment. Those ideas of which some attribute may be affirmed, are expressed by a class of words called *nouns* or *pronouns*. Attributes of these objects are expressed by *adjectives*; attributes of these attributes by *adverbs*. Ideas that *assert* attributes of objects, the return activity, are expressed by *verbs*. The mutual connection of ideas with other ideas is shown by the *preposition*, and that of judgments with judgments by the *conjunction*. Upon these evident meanings and their relations in the judgment, all the grammatical relations of words in the sentence are based. Groups of words—phrases and clauses—perform the office of some of these parts of speech. Often a single word has two or more uses in the sentence, and, too, words originally limited to one use often perform other functions in the sentence. With the growth of the language, many abbreviations and idiomatic phrases have arisen in expressing judgments, but no judgment ever contains other than the six distinct classes of ideas numerated above. The recognition of this fact and knowledge of the history of the philological changes that have grown up will greatly simplify many of the grammatical problems that arise in the study of sentence construction.

Of the practical value of this analytic study of sentences as an aid to accurate and rapid interpretation of the thought on the printed page, and also to correct speaking and writing by the student, something will be said later. It seems fitting to speak here of the educative value of this study in another of its aspects.

All the other activities of the elementary school direct the thought of the learner outward. The things the child studies

are objective—other than himself. He looks upon them as upon a panorama.

This is as it should be. To know one's self is the ultimate goal of man's endeavor, but his first steps toward its attainment are through an intimate acquaintance with the external world. There is a subjective world, however, of infinitely greater importance to him. To enter it too early in life is as disastrous as it is never to enter it. Only a small per cent of those who enter the elementary schools go beyond these. I do not see how grammar can be anything more than a memoriter exercise if the learner does not study the workings of his own mind in learning it. If he takes up a systematic study of technical grammar in the eighth year after the incidental analysis of the sentence necessary to satisfactory work in English in the grades below, an opportunity is afforded to introduce him to a study of the workings of his own mind, which is, at the same time, an introduction to the study of psychology, logic, ethics, and philosophy. It is impossible for one to arrive, in after life, at a rational and restful view of life except by a study of the subjective world which he enters or may enter through the door of grammar. It will give him the key to the solution of many problems that become matters of great concern later, should he care to solve them for himself. He must solve them for himself if they are solved.

The importance of the study of the sentence in the various forms of discourse, in order that one may accurately interpret its meaning and so be enabled to put his own meaning into the best form, is too evident to need elucidation.

That one can learn to speak and write good English by imitation, when his life is spent in an environment in which only such language is used, is evident, but no one ever becomes a master of his mother tongue by such a process. The rule of thumb is his only guide.

Much needs to be done to improve the pedagogical procedure which now prevails in teaching the grammar of our mother tongue.

Young people generally begin this study before they have gained facility in reading for the sense, or in the ready and accurate use of language in conversation, or in the easy expression of their thought in written composition. English is the study of major importance during the first six years of school life. During this period the child should not only acquire reasonable skill in the use of the sentence, in both the graphic and oral forms, but through his readings and conversations with his teachers, ideals of life and aspiration to achieve something worth while should become awakened and, as far as may be, established. This is a strong defense for a great deal of well selected and properly graded reading-matter in these grades. It should be borne in mind that good English is the utterance of the lives of the best people at their best moments, and that the school must, for the time, live their lives over after them.

Closely related to this ethical function of English study is the music, the manual training, and the graphic arts—what the uninformed call the fads of the elementary school. All the subjects of study become mere fads when we fail to articulate them closely and wisely with the inner and outer life of the learner. It is because of this lack of adequate articulation that the children often feel so little abiding interest in the work of the school.

The elementary study of these higher processes of life, which the schools of the former generation ignored, is one of the most valuable contributions made by modern education to the school life of the children. When the teachers have learned how to use them, their value will become manifest to all whose opinion counts.

We will now assume that elementary study of English, as an activity in the lives of the children, has been pursued for six or seven years, and that the functions of words in expressing judgments have been an incidental study to the extent that the knowledge could be employed in helping the child to master the printed page.

The transition from the elementary study to that of gram-

mar is more marked than is any other change in the entire course of English instruction. The movement to this point has been distinctively synthetic. The child has been advancing toward the construction of larger wholes from step to step, gathering ideas and creating ideals which called for more complicated symbols for their expression. He is now to enter upon an analytic study of judgments and their symbols.

This transition is difficult for the child to make because it calls for introspection, a radically different act from observation. All his life he has known his objects of thought as objective, whether they were objects of sense or of the imagination. Now he must analyze this act of knowing. One can conceive of a course of instruction in the elementary stage so artistically planned and executed that children in the sixth or seventh grade would be able to enter upon this introspective study understandingly. Whether profitably or not, I do not know, for I do not remember my own state of mind at that age. I have seen one class in the sixth grade that seemed quite as able as any eighth grade I ever knew to pursue this study. The class had had the best of instruction from the beginning of their school experience and the grammar teacher was an artist.

It is safe to affirm that children in general are set to work on grammar before the grammar-sense has sufficiently developed. But one seems justified in saying, also, that it is not so often the child's inability to understand as it is the teacher's failure to see what he needs to understand, that makes grammar so forbidding a subject of study. A prevalent pedagogical error in the beginning of this analytic study of English is to proceed at once with the study of the statements in the book. Textbooks in grammar in the hands of capable teachers are generally more valuable for the illustrative exercises they contain, than for the author's elaboration of his doctrine.

In the first stages of this introspective study the conversational method seems altogether the best way to open up the

subject. The pupil will not be able to study the movements of his own mind by fixing his attention upon the products of some other mind. He must be led to see himself making judgments and to discover the steps in the process. This requires a series of lessons continued long enough to discover not only the general process of separation and return—the completed judgment—but the function of the different classes of ideas in constructing the object (predicate) which is to be identified in some way with the ego that is the source of the entire movement. When this movement of the self in forming the judgment is recognized, the construction of the sentence symbol that is its verbal expression is an easy matter, and the functions of the separate words, inflections, phrases, and clauses in the sentence are no more difficult. Time taken to lay the foundation is time saved in building the grammatical structure.

Another pedagogical error of this stage of English teaching is the conviction which prevails generally that an exhaustive analysis of every sentence studied should be made from the start. It is better to articulate the large bones before giving much attention to the small ones. When the learner can see at a glance what words are needed to express the subject of that which he is studying, and can point out those that set forth its predicate, the mutual relations of words and ideas in subject and in predicate are not far to seek. But all these things will be clear only when the judgment expressed is clear.

When the subject is thus opened, a good textbook in the hands of the pupils for the study of such details and such illustrative sentences as the teacher may direct, is the only valuable use of such a book. The learners are now studying the thing itself—the sentence—and are not trying to learn what some one else has said about it, whose sayings they do not understand.

This seems to the writer a truly scientific method of studying the English sentence.

The practice of devoting two or three years to the study of English grammar is another prevalent pedagogical error. Such a study of the sentence, as has been suggested, for a single year, either in the eighth grade or in the first year of the high school, will give better results. The power to analyze the sentence at a glance is easily acquired when the learner's mind is prepared for the study; and the laws of punctuation, spelling, inflection, and syntactical construction, not already acquired in the grades below and which are needful for practical use and future study, can be acquired in the short period suggested, provided the pupil is interested in acquiring them. It is not easy, if it is not impossible, to teach a child anything he does not care to learn.

During this period of sentence study, the work done in the reading of literature should be, in part, a rapid thought analysis of the matter read with a view of noting the mutual relations of the ideas expressed. The purpose of this is to give facility in mastering the thought of the writer as one reads. This is easy enough in short, concise statements, but not so easy in long, complicated sentences. Many people in these days cannot read Macaulay and some other great writers of a former generation, because they get lost on the journey from the beginning of one of their sentences to the end of it.

This study of the sentence is introductory to that analytic study of discourse which is pursued in the English of the high school.

READING

The boy and girl period of growth, as distinguished from the previous period of infancy on the one hand—extending to about the tenth year—and the beginning of the adolescent period on the other, includes what, until recently, were known as intermediate and grammar grades. The marked characteristics of this period in the child's evolution have been already noted, and in some measure accounted for by the theory of evolution as the creative process of nature and of man. What

should be the general purpose of the training in these grades has, also, been tentatively suggested.

This period is the most inspiring one to the teacher who appreciates the attitude of the child toward life, and who sees the possibilities of directing these superabundant energies in the formation of ideals of manly character, and in the awakening of aspirations to achieve them. There is not less but more impulse to attain at this stage than at any former period. There is an evolution of strong desires, for a different sort of attainment. They seek to utter themselves in physical achievements. Their commanding ambition is power. This is the bottom reason for manual training and athletic sports. Athletic contests which are carried on in the spirit of justice and with a knightly regard for what is honorable, are a means of grace to the young. The wrong in our college athletics today lies at the door of the faculties of these colleges and universities. They do not sufficiently insist that those who disregard justice and are careless of their honor shall take no part in them. They may be rough sport, and occasionally a bone may be broken, but that is of little moment if they teach the boys restraint under strong provocation, and to hold to a high standard of square dealing.

This is a period when the English must help, and it can help mightily. Indeed all along the primary course the ideal school has been preparing the spirit of the child for this transition. It has there emphasized not only the amenities of life, and used the Sermon on the Mount as its guiding principle in selecting the stories and the readings and conversations, but it has not forgotten the sterner demands of justice which return his deed upon the doer to his own undoing at times. Some mourn that such retributive stories as Little Red Ridinghood, or Jack the Giant Killer and the like, shall be used in infant schools. The children delight in them because "it served him right." They see it, in their infantile way, as a square deal. The Great Spirit of the universe has so ordered things that in the process of evolution the deed returns upon the doer,

either from without or from within. Let the little child know something of this under the educative direction and in the atmosphere of love of a wise teacher.

I have no theory of procedure to suggest for teachers who have neither wisdom nor love. I cannot see how such can perform any service worth while in the school-room, either for the children or for mankind. Their opportunity for service will be found in some other field.

The reading done in this period should be adapted to the dominant interest of the children. The field includes history and literature. Concerning the character of the matter and the method of its presentation, I shall venture a few suggestions.

An *exhaustive* study of the aims and deeds of a people, whether our own or any other, would be unprofitable if not impossible by children below the high school. A *thorough* study of an outline in which the epoch making events are associated with the lives of great men of commanding influence in shaping these events, it is possible and profitable to make.

But whether it shall be made or not will depend upon the method pursued by the teacher, and upon his own mastery of the history and of the outline he follows. He is not to leave the children to dig it out for themselves. The history of any event or series of events is to grow in the minds of the scholars under the lead of the teacher where they all work together. As the history grows, material is accumulated which can be used to stimulate the prophetic instinct to conjecture what must follow. The teacher's ability to paint the panorama will be increased by the fullness of his own knowledge, and his skill in selecting the colors. By this method of oral and textbook study in class, the teacher learns the mental attitude of each child toward the matter in hand, and can better select the things for his study preparatory to the next lesson hour. In this way a bird's-eye view of the history of England from the invasion of Caesar can be gained in a single semester, and something of the stirring speeches of the great statesman can be committed

to memory and recited in appropriate places in the course of the study. Sections of this study would serve as subjects for practice in narrative composition and in this way the history and the English study are inseparably united. Another semester spent upon American colonial history in a similar way with constant reference to the concurrent events in England, binds the two into a connected whole, and leads the children to live over again the thousand years of their ancestors and to feel the price that has been paid for our opportunities.

This is the time for beginning the cultivation of the patriotic emotions. Love of country is an ever present motive with every people. The children are most readily inspired by the patriotic deeds of their own ancestors in the forum and upon the field of battle. The skillful teacher can lead them to live over these deeds with these ancestors in imagination, becoming not only an eye-witness, but a participant in the events that stirred the souls of the great. At these supreme moments the children should recite from the speeches delivered in the forum or reproduce vivid descriptions of scenes upon the battlefield, such as Morley's of the battle of Naseby.

Turn the impulse of the boys to do real deeds of physical prowess into doing imaginary deeds of heroism with the heroes of the world, inspired by their motives.

Matter for developing the literary taste and for advancing the child's ideals of life, must be chosen with reference to the stage of soul growth of the child. Unfortunately for the highest success, the children in the same class have not all attained the same rank in psychic power. What is said here has reference to classes in the seventh and eighth years as the writer knows them.

If we call all worthy discourse literature, we find it necessary to distinguish between the literature of knowledge and the literature of power. There is no easily defined line of cleavage between them, but in one the commanding emphasis is given to knowledge—information—and in the other, to its power to move the soul to aspire. Literature for entertainment

merely, may perform its function admirably and has its value, but that value is small when viewed in the light of eternity. But it is not to be discarded.

It seems to me that an adequate view of the teaching of English must see that it is for the upbuilding of character, and that character is one's *ideals* and *aspiration* for the good and beautiful; it is his *knowledge* of what is true in the world of nature and of man, and his *will* to do that which is worth while.

How to make the best use of the literature of power in the elementary schools has been the theme of many writers. My purpose is not to repeat what has been so well said, but merely to call attention to the fact that some of this literature is especially adapted to the interests and needs of the scholars of these two or three higher grammar grades. This is especially true of Scott's *The Lay of the Last Minstrel*, *Marmion*, *The Lady of the Lake*, *Rokeby*, *Ivanhoe*, and *The Talisman*, which can be made especially attractive to boys; and it seems to me that the boys of these grades will continue to be the object of chief concern to the teacher for generations to come. Many who have the greatest native strength leave the schools for active life from these grades.

Their ideals of life are not high and the impulse to get on in the business struggle is a reproduction of the struggle of man in his savage state to survive. Their impulse is to get on by a similar process:—by cunning and by power. The present sorrowful state of honor and integrity among those of high rank in the business world, and the worse than robber greed with which they have betrayed every trust, are a re-enactment of the robber stage of the evolution of the race; more despicable than that, in so far as these modern captains of finance and industry are more intelligent than were our savage forbears. This dismal failure of their lives would not have come but for failure in their education to establish ideals and aspiration for a worthier life than is the gratification of the thirst for power which ill-gotten gains can give. Certainly

English can be so taught in this period of boyhood that chivalry and knightly honor will become more attractive than sordid greed; Brutus a higher type of manhood than Shylock. I may not be pardoned for expressing the conviction that the boy at this age should be taught English by a manly man who can put himself in the boy's place. Indeed all the subjects which boys learn in school, which make most for manly character,—among which English stands in the forefront—should be taught by capable men. The school must have a virile atmosphere if it shall produce a manly product. Emerson said that he cared not so much what his boy studied as who was his teacher.

Power is our main reliance in teaching, but skill in the use of this power is only second in importance. One must know how the child learns if he would have skill in teaching him.

The child has the art instinct, but he is not at home in the art world. His art instinct has been strengthened in his English course below the sixth grade. It needs special culture during this period of boyhood. Art enters the soul as feeling. The greater the knowledge and culture, the better able is one to appreciate the beautiful, but art is felt rather than thought.

How can the artistic feeling be aroused in studying literature?

Certainly not by setting the novice to the task of digging it from the printed page without assistance.

Not until the learner is familiar with the author's style and can read at sight the meaning in the words, is he free to catch the spirit or feel the emotion of the author from the printed page alone.

Whether the author be Longfellow, or Arnold, or Tennyson, or Lowell, or Scott, it seems to me that the teacher must first give the student an introduction that shall awaken his dormant appreciation of what the reading portrays.

This requires that the teacher be a good reader; one whose voice, enunciation, countenance, gesture, shall fitly express the sentiment.

Suppose that the study be *Marmion* or *The Lady of the Lake*. Much of the first reading of the poem will be done by the teacher in class, after giving it its proper setting in the history and spirit of the time it portrays. This is done, of course, with explanations and conversations upon such points as may need to be cleared up, and with the class following the reading of the teacher in their texts. After reading the first canto in this way, the class could spend a period or two in reproducing the scenes in their own language, and in reading some of the most striking passages, whether of description or narration—in both of which Scott is a master. Portions of each canto can be assigned for home reading at the teacher's discretion and reviewed in class, preparatory to the next readings.

When the entire poem has been surveyed in this way, a basis is established for its more exhaustive study, provided the class is able to pursue this further study with profit.

But, whatever the grade, whether primary, grammar, or high-school, this general survey of the literary whole with the teacher in class should be first made.

I have found it to be the rule—to which there are exceptions—in schools including the high schools, that the class nearing the close of their study of Julius Caesar, for example, have not yet read the play through in class, and many of the scholars had not had sufficient interest to do it in their home reading. They look upon it as a grind during the class period.

To what extent the more exhaustive study of a literary selection shall be made will depend upon the ability of the class. Below the high school it should not extend very far. The chief purpose—but a silent one—in the grades is to establish ideals and aspirations for worthy attainment by encouraging a feeling of hero worship of a high order. This is certainly worth while when we consider that it is the strong, assertive, power-loving boys of our schools who are to become the leaders in society, in finance, in industries, in politics, and the like, and that they are to set up the standards and set the pace in such pursuits. The boys should leave the schools with

a strong detestation of lying and stealing under any name, and with a sense of honor and love of country, which forbids them to use their power to the injury of their fellow men. Nothing can do more to secure this result than the adequate teaching of English in the schools: English with the large meaning that is emphasized in these pages.

In closing these suggestions on one phase of the subject for discussion, it may be well to remind the Society that this paper is submitted not as a hand-book for teachers, nor as a finished and carefully articulated outline of such a book, but rather as a series of suggestions upon different phases of the work in English. It is hoped that the discussion will contribute so much to the solution of this important problem that a publication, more complete, for the furtherance of the ends suggested will be justified. (This much by way of explanation for evident and intentional omissions of important matter. The author would add that this entire study has been written at irregular intervals in a busy life, without as much attention to the mutual relations of parts as a more formal discourse would demand.)

ENGLISH IN THE HIGH SCHOOL

V

INTRODUCTORY SUGGESTIONS

There seem to be four quite distinct stages, or periods of transition, in the development of human life:—infancy, boyhood, adolescence, and manhood. In infancy there is no marked difference in the psychic growth of the two sexes. In the period of boyhood, the boy's instincts, impulses, and interests differ materially from those of girls, as has been already suggested. The transitions from girlhood to womanhood is much more rapid, and the changes in the views of life are much more marked than are the corresponding changes in boys.

The psychic difference between the typical boy and the man

is of slower growth than is the difference between the typical girl and the woman. The greater rapidity and violence of this change in girls makes of it a storm and stress period of greater intensity for them than is experienced by boys. For both, it is a new birth, where again, as from infancy, the angels of darkness are warring against the angels of light. It has been called the period of conversion, of self-dedication to a cause, good or bad. Shall the governing instinct in the selection of the aim of life be worthy or less worthy? Shall it be power or virtue? Material prosperity or spiritual riches? A life of service or of domination?

It is during this period that dominant ideals of life become established. It is a time, too, when the soul awakes to a fuller and deeper sense of what is really worth while, though it sees it as "through a glass, darkly."

It is a time, therefore, for wary walking by the teacher, and especially by the teacher of English. Not all the other high school studies together give so many opportunities for determining the future character of the student as does the English.

It seems to me that the teacher should come to this work with all that is known of this critical period of adolescence. And this, too, demands wary walking if one would discover the truth in the literature now appearing and to appear more abundantly in the immediate future.

The spiritual significance of this period has been but recently apprehended. It is a later phase of the spiritual evolution of the race of which the Christian church has been dimly conscious since the coming in of Puritanism. It has been known in the church as the period of conversion, and is to all persons a transition period of varying degrees of intensity. Shall the soul's advance to higher things or be arrested by the allurements of pleasure or of sordid power? The emotions are the dominant factor in giving direction to this new life, as they were to the former life. Dr. Hall calls it the "Golden Age," and such it is in its possibilities.

The teacher must himself be a master of English if he would attain the greatest usefulness. Neither here nor elsewhere can one teach that which he does not know and cannot do. His proficiency will be the high-water mark of his efficiency. But without an inspiring and well articulated view of life and of the school's relation to it, his learning will be of little avail in securing results that are worth while. Though he have all knowledge, it profiteth the student nothing. To love, to know, and to do, complete the cycle of the soul's activity. What he loves, knows, and does, determines and constitutes his life. An unarticulated arc of this cycle is worth nothing without the other arcs of the life process. Knowledge without the loving deed, or the deed not directed by knowledge and love, or love without the intelligent act, is each by itself, without real value to the individual, and often works sore distress to others.

English, to the high school student, should result in psychic power in solving the problems of life, and, also, in practical ability to enter upon some of the literary vocations: the up-building of the self and service to the community. It does not work mightily for the accumulation of wealth and is apt to be little regarded because of its small commercial value. But, as has been urged in a preceding chapter, it behooves the high school especially, and the highest elementary grade in some degree, to open the way to the student to a knowledge of himself and to a method of self discipline that has no direct relation to money-getting, nor to any other eminence either political or social. I have lived among and mingled with the informed and the less informed classes of people in the middle states for nearly three score and ten years, and not ten per cent of them place a higher estimate upon education than its commercial value. What cannot make good by this standard they would expunge from the curriculum. This is the repeated demand of the public press and in these later years the educational forum seldom advocates an educational process because it is good for the soul.

The teaching of English has its commercial side, but so long as commercialism is the direct aim of all the other than the linguistic studies, the high school may well insist that the English shall make its commanding purpose the laying of the foundations for a higher type of character than the present leaders of the financial, industrial, political, and social groups represent.

A school boy was recently describing the methods of an ice-dealer. The wagon would be loaded with one thousand pounds of ice, and the driver who would sell eleven hundred pounds from this thousand would be rewarded. The boy gave this as an example of business thrift, not of reprehensible methods. He thought everybody did business that way. He admitted that it was not fair, but no business is; business is for making money, and what one man gains the other must lose.

In the same city, whose moral status is of the highest in the state, prizes were offered for the three best Christmas stories written by high-school students. The daily press offered the prizes and among the stories which the editor selected for publication, was one of a poor boy who wished to give his mother a Christmas present. According to the story, a merchant had published in his show-window a fifty-dollar prize for the best guess of the use of a piece of mechanism there displayed, the purpose of which was well concealed. The boy had surreptitiously discovered its use while in the hands of the maker. He sent in his guess and received the prize which he promptly gave to his poor mother. The judges did not consider his story one of the best four, for it had little literary merit. But neither judges nor publisher considered its moral obliquity as worthy of notice. The writer of the story was wholly unconscious of any such criticism upon his work. It was business. When such things are done in the green tree what will be done in the dry?

On the relation of college requirements to high-school English there is need of more reflection. All agree that the English study which best promotes the life of the student during the high-school period is the best preparation he can make for college. There is no uniformity in the attainment in English of those who enter the public high school in different parts of the country. Some of the high schools in large cities are exceptions to this statement.

The range of the English for culture, or soul growth, must be a wide one. There can be more uniformity, perhaps, in the study of the form aspects of the subject. Worthy literary selections can be made for the more exhaustive study by the class which are easily within the ability of every member. These should be fairly mastered as standards for estimating future work. But the major part of the reading should offer a wide range when we consider the whole class as the unit. The range of each student will be greater or less, depending upon his ability. Each should read literature in the field of his interests, and the teacher should help him to select good literature in these respective fields. The value of this reading will depend upon the fullness of the teacher's knowledge of it, upon his interest in the individual student, upon his skill in suggesting what to look for in each book, and upon the character of the tests applied to discover the contribution the reading has made to the life of the reader.

In the growth of the human soul there is from the beginning a consciousness of likeness and of difference—of synthesis and of analysis—of unity and of separation. The building-up process is the leading movement in the period of infancy and childhood. This is the period of the accumulation of ideas. The product is an aggregation rather than a system.

In boyhood the analytic instinct grows toward leadership, resulting in the separation of ideas into classes—the inductive period of growth and of the creation of general notions. In the high school, there is, or may be, a rapid approach toward rational synthesis in which the logical or causative relations

of things come to the front. In all the three periods all of these activities are involved but the stages may be fairly well distinguished as those of *aggregation*, *induction*, and *deduction*. In the inductive stage the instinct to synthesize into classes is strong.

These two instincts, synthesis and analysis, appear in literature as the spirit that affirms—creates, and the spirit that denies—destroys. In nature it is seen as generation and degeneration.

Mephistopheles defines himself in Goethe's *Faust* as "the spirit that denies."

It will be noted that the creative, synthesizing spirit is the commanding instinct of the soul, when the development is not arrested. The aspiration of the human soul is toward unity with the universal soul, but that aspiration is yet weak and the school has undertaken to strengthen it. It is this conviction that inspires the teacher with a zeal beyond most other public servants. He may not be conscious of the cause of his devotion. He calls it his demon, perhaps, but it seems to me to be inspiration.

In the work of the grades the children have made no conscious distinction between the literature of power and that of knowledge. I apprehend that the artist will not admit that the latter is literature. A friend prominent in the educational counsels of the nation, was deprecating, before an audience of superintendents, the practice of attempting to teach the infants literature; and when I asked what he meant by literature he promptly replied, "That which neither you nor I ever write." He had evidently adopted the artist's definition.

But when the little child is stirred in his emotional and moral nature to a corresponding degree and after the manner in which literature stirs the artist, by the stories told by the teacher or read from the printed page, I think one may call that "literature of power"—at least for educational purposes. It certainly has the content of such literature, and it is the content more than the form that does most for character.

The high school undertakes to make manifest to the student the importance of an artistic form to adequately express a literary content. The high school cannot make artists but it can make it clear to the students what they must know to become such. The high school ought to set its face hard against the pernicious doctrine that all art, including literature, has for its commanding purpose the gratification of the artistic feelings—"art for art's sake." Certainly the only real demand of public education is for artistic expression of a true and noble sentiment. The vulgar dance-girl of the French art is not educative however entrancing may be the coloring. No more are corresponding creations of the poet. Whatever is fitted for use in the schools is more valuable for its meaning than for its style of utterance.

The content of true art must be the content of spiritual life—love, moral will, and thought.

It has become an established conviction of the writer that the elementary and high schools ought to do more for the boys' English than they are doing. Beyond the age of ten or eleven years, the mixed schools are better adapted to the nature and needs of girls than of boys. Some one has said, in substance, that the boys are sent to girls' schools. Of the rapidly increasing difference between the impulses, desires, and ambitions of boys and of girls beyond the age of ten, something has already been said in this discussion. This difference is universally recognized by teachers and parents of experience, who are sensitive to such matters. It seems to point back to some former period in the boyhood of the race, when the men, like the savage Indian tribes of two generations ago, must needs train themselves for war, while the women discharged the duties of domestic life. It may be that this inheritance will die out in some future period in the growth of man. We even now have feminine boys and masculine girls; but the boys who will do the men's work in the world for generations to come are, in spirit, the masculine boys who give sentimental mothers great

anxiety because they are not like their gentle sisters. This difference in the psychic impulses, whatever may have been the original cause of it, calls for recognition from the schools. America is making a mistake in converting her grammar schools into girls' schools, and her high schools into female seminaries to which boys are admitted. Boys from the age of ten or eleven must have for their dominant influence manly men, if vulgar greed for money-power or for political domination shall not entirely supplant moral power in the estimation of the mass of mankind, and of Americans in particular. We are in that stage of our evolution when a few strong, dominating spirits set the pace for the mass who always follow.

These boys need a course of instruction, especially in English and in history, taught by men.

How to make a re-adjustment of the teaching force to meet this need is a matter of detail. But the need seems to me imperative that these boys shall pursue those studies that afford the best opportunities for establishing ideals of noble living and for awakening aspirations and moral will to achieve them—such as English and history—under the lead of a man able to command their respect and to arouse their enthusiasm. Women can teach mathematics and science and art to boys as well as equally capable men can do it. But women are not competent teachers of boys in all subjects, as men are not competent teachers of girls in all subjects. If we are to continue to have mixed schools provisions should be made for about an equal number of men and women teachers in the high schools and higher grammar grades, and some of the classes should consist of boys exclusively and some exclusively of girls.

It is not in the aim of this discussion to consider the method of procedure in teaching literature in the high school. This society is not interested in such matter further than its general bearing upon the purpose of English study. The adolescent period is one of intense but uncertain psychic activity. Much work can be done by the students, but the school relies upon different influences to secure it from those employed in the grades.

The boy can be driven by influences more external; the adolescent must be inspired. This is a time, it is said, of devotion to ideals and causes. The school must give steadiness to the enthusiasm and plant the standard of a worthy cause. What was pursued for ends more external by the boy must now be seen as an end in itself—truth for truth's sake; right because it is right; loving kindness without thought of reward. When this finds utterance in form most fitting, the beautiful has appeared.

It seems to me that the material used should not only be a rich contribution to the commanding aim of English study—the building of character—but it should be so selected that it will serve as a conscious introduction, under the guiding hand of the teacher, to the four fundamental forms of discourse.

To enter upon the investigation of what particular literature should be studied would carry us far afield from the aims of this discussion.

The study of English in the high school has for its commanding purpose:—

First—The building of character controlled by moral will.

Second—Leading the students to live over again to the extent of their ability *the feeling, the thought, and the purpose* of the best that has been said and done in the world.

Third—To so do this that the graduates will take pleasure in reading that which has permanent value, and will be able to learn to distinguish the counterfeit from the genuine.

Set them in the way of determining for themselves what are the great books in the world and why they are great. They will thus be prepared to enjoy in their hours of leisure the companionship of the great souls of earth when at their best. By these accumulations of years they lay up for themselves treasures that can be fully realized only in the green old age which will thus be assured and become an increasing joy. Old age is then the Terrestrial Paradise instead of the Inferno so often the experience of the aged.

To do this in any effective way the high school must begin where the grammar grades leave off. If what is essential to such a study has not been done in the elementary schools it must be done by the high school before it enters upon its own legitimate work. This seems a truism, but the English work in many a high school comes to naught by disregarding this injunction.

The evil effect of undertaking to do what the learners are not prepared to understand and appreciate is manifest in the total indifference of a large majority of young men and women graduates to any reading other than the poor sensational novels that crowd our public libraries. The writer has offered publicly and repeatedly to publish reports made to high school principals of the home readings of recent high school graduates of one and two years' standing, as a test of the influence of their English study upon their desire to read and their selection of books. He has been answered invariably by silence and a reproving countenance. The public libraries report novels galore of the weaker sort as the reading of these young people.

A marked change from the material used in the lower schools should grow in the high school *pari passu* with the rapidly changing spiritual nature of the students. The selection of this material must be determined not by its excellence as literature solely, nor because of its value in the study of the historic development of literature, nor on any grounds other than that it will best meet the present needs of the students. Those needs the teacher must be able to discover. The experience of others will help him in his search, but there are no hard and fast boundary lines for all schools and all teachers. What we are seeking is growth in character, and character—the character we are seeking to promote—is a complex of psychic activities in which there is love for what is “noble and of good report,” knowledge to direct in its pursuit, and will to persist in its attainment.

Principal Percival Chubb in his admirable book, *The Teach-*

ing of English, says of the high school in its relation to the higher institutions:

"The high school course in English must be framed to incidentally dovetail into the higher institutions of learning. Incidentally we say, because these institutions have no peculiar demands to make upon the high school, other than those which these schools should make on themselves,—namely, that the work they undertake to do shall be well done."

May I suggest that these are quite different grounds for our selection than are the entrance requirements of colleges and universities. These requirements are valuable for their suggestions, especially to the experienced teacher, but they should never be directive. How a principal of a high school can continue to follow blindly any directions of this sort which he knows are not applicable to his school, and yet sleep well of nights, is to me a mystery; any principal, I mean, who has not bowed the knee to the spirit of commercialism that is now rampant in society. Education must be viewed in the "light of eternity," not in the light of frenzied finance—that temporary craze of our unstable social order. If the commercial spirit shall stalk on at its present pace for more than the lifetime of the other fads, education itself will become a fad, and no need will then remain for serious consideration of its purpose and method. These will change with the seasons.

COMPOSITION.

In the Lower Grades.—Little has been said in these remarks, except incidentally, of Composition, the matter of greatest moment in teaching English. The psychic growth of the child is a compound of movements from without inward, and from within outward—from object to subject, and from subject to object. The one builds up knowledge and the other creates power. The ever recurring questions are, What knowledge is of most worth? and, To what ends shall power be directed? The answers which the teacher makes, either consciously or unconsciously in his teaching, must depend upon his view of the

world. Is he viewing his work in the light of eternity, or is he following the injunction, unconsciously it may be, "Let us eat, drink, and be merry, for tomorrow we die?"

But for whatever ultimate end English is taught, the successful teacher for that end must recognize that building up knowledge without creating the power to use it is of little worth. From the start, therefore, impression and expression are the twin activities in the process of growth. Expression has been too little regarded in the past. The new movement in teaching English has been stimulated by the new movement in human thought, and by the more rational view of the soul.

Composition is the expression-side of the learning of English. It is both oral and written—expression by the tongue, and by the longer circuit through the fingers. It is, or should be the expression of the self. The child's out-of-school life is at every point self-expression. The teacher is discovering that this is probably the reason why out-of-school life is often so much more interesting to the child.

The teacher, from the primary grade through the university, must be ever working for knowledge *and* power. Knowledge does not become power except through half-a-life-time of discipline. The old adage that "knowledge is power" was first formulated by a master. It is not true of the child. It requires constant watchfulness to keep these twin activities working in harmonious co-operation in the growing mind.

But composition is more than expression, it is the *ordered* expression of English. It begins with the construction of the single sentence, which is not composition in the school meaning of the work, and advances by uniting two or more sentences to express a larger whole. The union of two sentences for this purpose is the simplest form of discourse.

This expression of the self is so important an element in English training because of the demands it makes on the personal initiative of the learner. Exercises in English are composition, in the strict sense of the word, only so far as they call into action this initiative. There is much done as compo-

sition that is *imitation* merely. There is little if any of the personal initiative in it that promotes growth in English. It may be useful in learning the mechanics, but drill in the mechanism must not be confounded with the teaching of English.

Imitation, Memory, and Imagination, the commanding trinity of the child's inherited psychic endowments, are supremely active, and form the line of least resistance for expressing himself in English. The teacher and the other environment which she supplies, must be his inspiration. Talking is the mechanism to be used. The teacher is the environment, beyond all other, the most important. Her voice, her face, her manner and fitting language, and more, her spirit and enthusiasm and skill in putting things are the main reliance of the children. Of the need of these acquirements mention has already been made. It is under the skillful leadership of the teacher in these grades that the child must learn to talk in an orderly way and to use the best words for his ideas.

This oral movement is the commanding one in the first five or six grades; but there must be, at the same time, a growing power and skill in speaking through the fingers. The need of giving the child freedom to utter himself without restraint during the English class-period is apparent, if he shall not sink into discouragement.

The success and want of success, in the schools of the cities, in securing for the pupils a free expression of themselves in written composition in the third and fourth years of school, was clearly shown at the late exposition in St. Louis. In some cities whose reputation for good schools is more than local, there was no evidence of personal initiative in the children's writings. What one member of the class said, all members said. In other cities, notably in Cleveland, there was evidence that the children each gave utterance to his own thinking on the matter before the class. The penmanship and the spelling were not so near a good standard as they were in the more uniform compositions of other cities, but the children showed more power. We have yet to learn that excellence in ex-

pression grows step by step with forceful and connected thinking, and that both of these are matters of slow growth; as slow as the growth of the child. A young child who cannot talk well, cannot write well. He cannot write so well as he can talk, unless his training in writing has been abnormal. With age one may come to utter himself best through his fingers and lose the power to do it well through his tongue, but children should not be so trained.

In the Higher Grades.—In the lower grades prominence is given to oral composition. The importance of training in oral composition as the scholars advance in the grades does not decrease but increases, rather, to the end of the high-school course.

The written composition is of increasing importance from the beginning of the seventh year. In the last two years of the elementary schools the boys and girls should be driven hard on the mechanics of composition writing. They will by this time have enough in their lives and enough coming in from day to day to write about. But they need sharp training on the best sentence formation to express the meaning; on the best selection of words to express different shades of meaning; and in giving a free wing to the imagination under guiding reins that are felt but are not oppressive nor depressing. This is preparatory to that freedom of expression under the established laws of good English which it is the especial function of the high school to encourage and promote.

The commanding function of English in the high school—to quote Principal Chubb in his truly great book, *The Teaching of English*, is “to make of a student, first of all, a character, and only secondarily an intelligence and an aptitude.” The multitude of avenues from which character building come into a serious and skillful procedure in teaching composition, will become manifest to him who has an open mind and a seeing eye. But it is only by the efficient performance of the second function that the first can be realized.

The scheme of the high school seeks to promote a friendly acquaintance, at least, with discourse in its four forms of narration, description, exposition, and argument. In most high schools this work is distributed over the four years of the course in this order. The method of this distribution is important.

There are few discourses of any considerable length that do not use all these forms. The school should recognize this fact. The models studied and compositions written should be such as put major emphasis on the form selected for the period during which it is to be practiced, in order that its peculiarities may prominently appear, but it is an error to limit the compositions to one form during that period. The same caution applies to the study of every other form of English—such as poetry and prose; dramatic, epic, or lyric composition; etc.

This appears self-evident perhaps and unworthy of remark in this presence, but the habit of chopping our subjects of study into distinct sections has become so confirmed as to destroy the unity of the movement in very many schools. The leading process in school life as in all life is synthesis; and analysis is only valuable to reduce vague, chaotic synthesis to a synthesis that is organic—unity in variety; many in one.

The need of continued oral composition in these forms is not sufficiently recognized. To become a good talker is in school only secondary to having something in mind which it is worth while to say and say well. This can be acquired only by practice in talking under friendly and helpful criticism. This calls especially for the extemporaneous debate so prevalent in good academies fifty years ago. It calls for a great deal more of oral extemporaneous discourse than high schools in general require.

The thing the high school needs in its English work above all things is sincerity. In the lower grades, the children need to practice it in every grade. In the high school, they have grown to a proper esteem for their own views and conclusion in all other subjects than English. That may be because Eng-

lish is not so well taught in the lower grades as are the other branches. But if the student in the high school does not feel free to give utterance to his convictions, and does not use that freedom concerning all matters that come before the class for discussion, the value of the English study for character is small. Entire sincerity on the part of the teacher and the class is the one thing needful to satisfactory results. This has been assumed in every line of this study as the *sine qua non* of success in every grade. We are such blunderers in teaching that our pupils are not telling us how it seems to themselves but are guessing what the teacher wishes to have them say. From the start they should be persuaded to state their own attitude toward the matter. It is then that the teacher has the proper data for leading the learner to correct his view. But in the high school this attitude of teacher and student toward the matter in hand is imperative.

CONCLUSION

This study has been made not as a criticism on the prevailing work in the elementary and high school, but rather to suggest how the teacher's view of the world will determine his procedure in every stage of instruction. If he views the universe as a machine run by power applied from without, mechanism will prevail in the school. The school then becomes an appliance for moulding pliable material into citizens, or financiers, or mechanics, or any other artisans, according to some pattern. It moulds men as we mould pottery, and it hardens them by drill. Every child then comes out of school a case of more or less arrested development. His personal initiative is at the lowest and conventionalism rules his life.

If the teacher sees the world to be a live and growing organism, moving on toward the realization of the highest attributes of soul but which is dependent upon the influence of environment for its progress and attainments, he pursues a very different course. He then realizes that greatness of soul is

greatness in ideals, and in moral will, and in knowledge—the attributes which the instinct of the soul declares are the universal soul. He must then work for growth in character first of all, with the abiding faith that if the child is wisely guided to this attainment, whatever else is needed will be added unto him. This is but saying that many of us need to change the emphasis in the training of children—not to leave the preparation for the mechanism of life undone, but to give the major emphasis to the upbuilding of the soul. The best study of English will help mightily to this end.

GENERAL SUMMARY

I

1. The writer suggests a view of the world as a foundation upon which to build a course of instruction in English. He does this not to impose any view upon the reader, but because there is need of our having some theory of the universe consistent with the growth of the race, by which to guide our course in fitting the young to pursue a rational and inspiring theory and practice of life.

2. This theory regards the universe as a process composed of an infinite number of inter-related processes—not as a mechanism constructed by some power external to itself. The process by which the universe, so far as known, is constructed is evolution. The working principle of evolution is that changes come as the need of these changes becomes imperative.

3. The supreme result of the evolutionary process on this planet is self-consciousness. This is conceived to be “the efflorescence of the human plant” to date, and not “a wart raised by the sting of sin,” nor “a fall or a process of purgation.”*

Self-consciousness makes the creative activity of the soul possible, and is the condition of all knowledge. Man knows only that which his consciousness creates. The unit of this creative process is the judgment.

4. There is no dead thing in the universe. Everything is a phase or aspect of activity—appearing in Nature as Motion, and in Man as Consciousness.

5. The creative processes are cycles, corresponding to the cycle in self-consciousness called subject-object: The Absolute Cycle is (1) Ego, or source; (2) Nature, the object or predicate of the thought of the absolute; and (3) Man, the image of the absolute in that he is self-conscious and creative, and through his creative activity rises more and more into spiritual

*Hall's *Adolescence*. Vol. II, page 67.

identity with the Absolute Source, and so completes the cycle.

6. This view of the world makes Psychology enlarged to include the Universe the last system of thought for the race—the three systems in the evolution of man being: 1. Religion; 2. Philosophy; and 3. Psychology; which latter completes the cycle in the thought of the race, corresponding to the cycle in the judgment of the individual and to the cycle of the creation of the Universe.*

7. It is by the inflow of the soul of the world into the soul of the child through avenues which it is possible for the school to open, that his life becomes in a small measure, *one in love, knowledge, and moral will* with the soul of the universe. The school, directed by man, has been substituted for nature's laws of evolution in directing the growth of the child.

8. Of the evolution of the child as revealed by genetic psychology, it is not necessary to speak in this summary further than to call attention (1) to the inheritances which the child enters upon at birth—Feeling, Memory, Imitation, and Imagination—which are the commanding activities to be used in training the child in his early school life; (2) to the period between infancy and adolescence—especially in boys—when the instinct of power and domination is a leading factor; and (3) to the adolescent period or the period of new birth—a marked transition in education the importance of which has been but recently appreciated.

9. The *view of the world* here suggested, regards feeling as the primary and commanding stream in the psychic life of man, as religion makes love the supreme attribute of the Absolute Ego. As God is love, rather than intellect or will, so man is feeling with will and intellect as auxiliary activities for realizing his desires and aspirations. The contention is that there are as good grounds for this conception of soul as for that which regards either intellect or will as the supreme attribute, and that this view of the matter is the most inspiring for the

*See *Introduction to History of Ancient European Philosophy*—Denton J. Snyder; also *Prolegomena* to his recent book on Feeling.

teacher as well as more in accord with the history of the human race.

II

The succeeding sections of this study are so much of the nature of a summary of the entire procedure in teaching English, as to make a further abbreviation of it of little value. The design has been to commingle reasons for doing things with suggestions of the method of the doing, and to arrange these under the three general heads—(1) English in the Primary grades; (2) in the Grammar grades; and (3) in the High School.

Emphasis is given to the child's characteristic psychic activity involved in each, as:

Primary—Unconscious Synthesis and Analysis during the first six grades, with Analysis rising more and more into consciousness.

Grammar and first year High School—Analysis as the leading conscious activity with a growing consciousness of synthesis.

High School—Major emphasis on conscious synthesis with analysis auxiliary to this end.

The teacher of English should recognize these different attitudes of mind in these different periods.

The prevailing conscious attitude of the pupil in every grade must be a desire to attain an end. The primary function of the school is to supply the environment that will awaken the desire.

This report places the chief reliance in primary grades (to the seventh year) on oral speech by teacher and children, with a slowly increasing reliance upon the pupil's ability to work alone profitably at anything other than what is mechanical. He matures no faster psychically than he does physically.

The point of departure is from meaning, and the end is other meaning—not from form to other form, in everything but learning the mechanics of knowledge. Children can ap-

preciate and enjoy what they cannot express. The former stimulates the desire for the latter.

There are two movements in psychic growth: (1) *Impression*, from without inward which gives knowledge—and (2) *Expression*, from within outward which gives power. They grow *pari passu*.

Imagination works for power, imitation for knowledge. Knowledge does not become power until the artisan has become an artist.

Repression and *license* are another Scylla and Charybdis in the path of the teacher.

The story as an educative agency for power is neither used nor appreciated as it ought to be; especially during the years when the imagination, like the memory, is wildly active.

III-V

The theory and method of teaching English Grammar presented in this study is not popular. But neither is much else said in these pages.

The doctrine is, in brief, that the subject of study is the sentence, and that the sentence is the judgment expressed in words. The life of the sentence is the judgment. As is the judgment so is the sentence. The meaning is, therefore, the key to the formation of the sentence. To know how to construct a sentence one must know the relation of the ideas in the thought which the sentence is to embody. This is the doctrine in a nut-shell. Grammar does not differ from other studies in so far as what is embodied in the form is to determine the form in which it is embodied.

The Grammar chapter in this book outlines a simple procedure of studying the formation of the sentence along with the study of the judgment expressed by it.

The reasons given for such a study of the sentence are:

1. That the habit acquired of analyzing the sentence to discover the thought will give the person greater facility in interpreting at sight the printed page accurately and with facility.

2. This study of the self in the act of forming judgments introduces the learner to a subjective knowledge of himself in his process of thinking, which will serve as an elementary preparation for the study of other subjective branches of knowledge. It is the only study in the elementary school that helps one to know himself.

The demand for more strong men in the teaching force of the high school is imperative, not because men and women cannot teach the branches of knowledge equally well, but because in those studies which make most for character, strong men are the better teachers of boys. There may be no sex in mind, but there are certainly sex characteristics in human souls.

The opinion has come to prevail quite generally that the test of a good high school is the ability of the graduates to pass the entrance examinations to higher institutions. The average high school graduate is certainly prepared to enter upon the next step in his education, but the influence of prescribed college requirements upon teacher and students is not salutary. The work of the schools too often degenerates into a grind "to pass." The "commissioned—High school" badge may cease to be a mark of honor unless there can be a better articulated movement of the process of education from kindergarten to university. There is a historical reason for this want of articulation which needs to be studied.

A general survey of English in the schools both as to methods and results, reveals the need of radical improvement in our methods of teaching English composition. The importance of this is emphasized throughout this study. The difference between knowledge and power is the difference between accumulating the results of the thinking of others and creating.

We do not properly interpret the meaning of the maxim, "Knowledge is power." Power creates; knowledge imitates.

THE TEACHING OF ENGLISH IN THE PRIMARY GRADES OF THE CLEVELAND PUBLIC SCHOOLS *

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Supervisor of Primary Grades, Cleveland, O.

I. GENERAL SURVEY

Our Theory in Brief.—To create or arrange for the child such conditions as shall enable him to react upon his environment and, transforming it, appropriate it; and under the inspiration and instruction of the teacher to pursue an advancing ideal. Self-expression is obviously one of the essential activities of this process; its modes are various. The most universal of these is Language—the subject to be discussed.

The Content or Subject-Matter.—The so-called “Language Work” includes therefore all the agencies of the school for the education of the child as formulated in the course of study.

The Presentation.—A constant effort is put forth to vitalize instruction by bringing it into direct relation to the actual experiences and inherent interests of the child—to couch it in terms of “the known.”

It is our aim to make the child himself, wherever possible, the gatherer and recorder of his own experiences. (In observation work we insist upon individual not class work in observing and recording.) In such subjects as history, literature, etc., each individual teacher takes her own way to attain the

*[Among the teachers and schools that have got the highest order of results in the teaching of English are those of Cleveland, Ohio. And after all, of course, the results are what we want. It has seemed to me highly worth while to present here at least a glimpse of how the problem of English is conceived in the Cleveland system of education, what ideas guide, and what means are applied in bringing about such results as have been secured all the way from the first grade to the close of the high school. Through the courtesy of Miss Davis and Mr. Muckley I am able to let the Cleveland plan speak for itself. Even this fragmentary glimpse means much if it is read with care.—EDITOR.]

common aim which is to so present the matter that the pupil *assimilates* it and in giving it back *interprets* rather than *re-produces* what has been presented. An examination of the compositions and composing exercises shows this result to be the object of the work of every teacher in the primary grades, (it is of these only that I write) a result attained with a greater or less degree according to the skill of the teacher.

To Illustrate the Usual Mode of Procedure.—In the History work the story of our country is told as a narrative in successive chapters, so to speak, beginning with the simplest stories told of Columbus, the Indians, the Pilgrims and Washington and Lincoln in the first and second grades and continuing through to the present time in the third and fourth grades. This forms the basis of training in oral language. The narrative widens at points of importance and the event or personage around which the interest centers is given special study and becomes the subject of a composition. This subject-matter at this point is specially prepared by the teacher for the purpose and analyzed as to its sub-topics. It is given to the pupils in this wise: first the story is told through simply, following the analysis in the mind of the teacher, without much detail that the pupil may have a bird's-eye view of it as a whole. The teacher then goes back and amplifies each point and, in districts and grades where it is possible to do so, directs her pupils to read upon the subject.

(The analysis into sub-topics, referred to above, is never given as such to the pupils; we wish each to have the occasion and feel the necessity to do his own organization or thinking together the details into a unified whole which constitutes *his* view or interpretation.)

This presentation by the teacher is followed by a more or less free talk or discussion of the subject at one lesson-period, and it is written at a subsequent one. The only help given is the writing on the blackboard of words of which the pupils ask the spelling; this they are quite free to do.

Besides these longer compositions, there are frequent "Com-

posing Exercises." Less formal than the compositions and not requiring so much organization they serve many purposes for training in the use of written speech.

The Training in Form.—The Correction of Compositions: One set in three or four is thoroughly corrected in all errors of form and copied by the pupils. (The first draft of all compositions is kept for the Supervisor.) At least one set in three is corrected for spelling alone and in the following manner: The teacher counts the number of misspelled words in each and places that number at the head of the composition, keeping herself a list of the words most commonly misspelled in the set. At the next language period the teacher writes the words on the board and the pupils are set to finding which of these are their words. In the case of the very poor spellers, the teacher places the figure opposite the line in which the word or words occurs. In some schools the teacher skillfully manages to have pupils who have only one or two words to correct help those who have many to find their words, thereby engendering a spirit of mutual helpfulness and social good will. Meanwhile she herself is helping the very poorest ones over hard places. The object of this exercise is to make the pupil self-critical, that he may become self-conscious of his own liability to error. Moreover a pupil who has found and corrected his mistakes, learning to spell them through the exercise of his own powers, has not only gained in power but when he next uses these words will be much less likely to misspell them than if corrected by the teacher and written by him more or less automatically after a copy.

The reason of poor spelling in the pupils all over the country is not for lack of time and good hard work devoted to spelling. In our own fourth grade, for instance, the number of minutes per week given to spelling by our course of study is equal to the combined time given to history and civics, composition and constructive work, literature and nature study. But it is due to many causes, not the least of these is the spirit of the twentieth century that we have to combat, its lack of regard for

law and order and personal responsibility. Another and inevitable cause not reckoned is the composite nationality of our pupils, more than thirty-six per cent in Cleveland being of foreign parentage. Still another cause is the greater range and farther grasp of thought of the youth of today than in the "good old times."

We use every means and all our skill as preventive first, and second as corrective of this tendency to misspell. In the exercises outlined above, a sense of personal responsibility in the matter of spelling is one of its aims and results. (A greater attention paid to acquiring habits of correct pronunciation and clear enunciation will all help immeasurably in preventing errors in spelling.)

Mistakes in punctuation and capitalization are treated in the same manner as the spelling, one set in a group of three being given to this class of mistakes, while errors of structure are made the subject of special exercises which we call

Constructive Work.—In the primary grades only the simplest forms of punctuation and most commonly used cases of capitals are taught and these mainly by imitation and use. The simple sentence with its appropriate capitalization and punctuation together with quotation marks and the apostrophe in abbreviations, and the possessive, forms the basis of this work in the first three grades. In the fourth grade we introduce the use of the comma in its two simplest forms; its use in place of "and" in a series, and to set off a name in direct address. I also find children instinctively using or showing the need of the semicolon by using the compound sentence form. Where the class is ready to take up this it is given.

We do not try to do more than introduce paragraphing in the fourth grade. It is first studied in the reading matter, the pupils becoming gradually aware of what constitutes a paragraph before they are asked to try paragraphing their own work.

The outline for "word study" in the Assignment is to be

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II GRADE READING—DIRECTIONS FOR TEACH

says, "To use books rightly is to go to the
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and councils of all time."

and councils of all time.
Keep steadfastly in view the one great purpose
of Reading, which is, that through the attainment
of reading, the knowledge and wisdom and joy
become his who will exercise it to that end,
that the learner may become conscious of all
that is to be read—of all the avenues of knowledge and
open up for him to the end that he be eager
for his inestimable privileges.

act oral delivery, though not an end in itself, is a accomplishment which it is the special duty of the teacher to give, and should be made a matter of special importance. First, the manner of his oral delivery constitutes the student's understanding or lack of understanding of the matter; and second, it is the measure of his power to convey as well as to glean the content of the text. There are two phases in the teaching of reading: Intensive Study and Extensive Reading. In the Intensive Study, an analytical study of selections of literature is made and results are many; the most important is the development of thinking power.

formation of the habit of studying deeply into
acquirement of taste for and appreciation of

Cultivation of the higher emotions.

training in the acquisition of knowledge
page.

Training in oral reading.

The first steps to be taken in this Intensive Study are

The first step should be the *Silent Study*. The first, purely memoritor; the purposes of assimilation, is of the highest order.

studied by each teacher and such of the work as is possible and appropriate for her class selected and supplemented by other special work in these lines of which the language lessons, both oral and written, reveal the need.

In many districts most if not all of the work outlined in the course of study can be given, while in the foreign districts the teachers need to spend much of the time in building up a simple common "working vocabulary" of the English language.

In a circular now under preparation I am saying to the primary teachers:—

"If the teacher in each grade will follow the policy of adding to the vocabulary of the children each week two (at least) good, strong, useful *new* words (keeping a record of them before the class if possible), it would result in the accumulation of nearly one hundred specially good words each year which would constitute a valuable property at the end of the pupil's school life.

"To illustrate: take the word *nice* so commonly used and give 'agreeable' and 'pleasant'; or 'generous' and 'accommodating'; 'comfortable' and 'convenient' as some of the meanings which were meant to be conveyed by 'nice.'

"High school teachers complain that pupils have a paucity of adjectives. Let us take the hint and do more direct work in this particular, not, however, confining ourselves to adjectives and adverbs.

"The 'word study' on pages 74 and 75 of the Assignment gives practical hints for this kind of work in 'increase of vocabulary' and 'choice of words'. Let us pay more attention to this feature of the work from now on."

The correlations—the interaction of school agencies—are shown to some extent in the circulars used as guides for details of the work.

II. FOURTH GRADE READING—DIRECTIONS FOR TEACHERS

Ruskin says, "To use books rightly is to go to them for help; to be led by them into wider sight, purer conceptions than our own, and to receive from them the united sentence of the judges and councils of all time."

Let us keep steadfastly in view the one great purpose in the teaching of Reading, which is, that through the attainment of the art of reading, the knowledge and wisdom and joy of the ages may become his who will exercise it to that end, and coordinately that the learner may become conscious of all it means to be able to read—of all the avenues of knowledge and power thus opened up for him to the end that he be eager to avail himself of his inestimable privileges.

Correct oral delivery, though not an end in itself, is nevertheless an accomplishment which it is the special duty of the schools to give, and should be made a matter of special training. First, the manner of his oral delivery constitutes the proof of the reader's understanding or lack of understanding of the subject-matter; and second, it is the measure of his power and skill to convey as well as to glean the content of the text.

There are two phases in the teaching of reading; the Intensive Study and Extensive Reading. In the Intensive Reading we make an analytical study of selections of literary merit. Its purposes and results are many; the most important are—

1. Development of thinking power.
2. Formation of the habit of studying deeply into a subject.
3. Acquirement of taste for and appreciation of good literature.
4. Cultivation of the higher emotions.
5. A training in the acquisition of knowledge from the printed page.
6. Training in oral reading.

The steps to be taken in this Intensive Study are as follows: The first step should be the *Silent Study*. There are two kinds of study, the first, purely memoritor; the second, for the purposes of *assimilation*, is of the highest order and

requires that a vital connection be made between the experience of the child and the matter to be studied—the knowledge to be acquired. Therefore the silent study of the selection, which is for the purpose of the pupil's making the subject matter his own, should be preceded by a short talk which will explain "the setting" of the story—if it be a story, give a hint of the central interest and put the pupils in touch with it through some related experience or knowledge of their own; the result of this preliminary talk should be an eager interest to read the selection "to find out what it is all about." Sections I and IV in Language Lessons will be very helpful in this part of the work; but besides this the teacher will need to make a thorough and thoughtful study of each selection. The splendid work in the study of literature which is being done almost universally by the teachers this year, will I am sure, bear fruit in this preparative study they make of the selections in the readers and in the treatment of the poems.

The Silent Study accomplishes two things; it gives an acquaintance with the whole which illumines and makes clearer the details of the part; and it gives the pupil the opportunity to gain through the exercise of his powers, what otherwise he is helped by the teacher to get, for he will exercise his ability "to sound out words" and will thus "make out" for himself most of the unfamiliar words the meaning of which he will gather through their association in the sentence or from sections III and IV in the "Language Lessons." It follows logically that if the pupil is set to the task of *getting the thought* from the printed page, he should have an opportunity of *giving it*. With a few exceptions most of the selections are in story form; therefore the second step will be—

Telling the Story—The value of this lies in the power of initiative it generates; to get a pupil to stand on his feet and tell independently and in his own phraseology what he has gathered by reading the printed page is a great educational achievement. Every story in the reader has two or more well defined parts, each of which is a unit in itself. Let from three

to five pupils each day "tell" the story—either a unit or the whole story.

The third step, usually in the same recitation period is the *Paragraph by Paragraph Study*. The pupils are set to studying each paragraph in turn with a view, first, to getting the words; for, though many of the unfamiliar words will have been mastered during the independent study, there will still remain for a number of pupils, especially in our foreign districts, words not included in the lists in the Reader, which they do not know and must have help in "making out." But we often find that *they do not realize that they do not know* words and they must have special training to become self-conscious of their lack; if you can accomplish this, it will be a great gain and of universal application. But the chief purpose of intensive study of the paragraph is to get the *full* meaning of the text. To do this effectively the thought must be analyzed and through this analysis we must make the pupil conscious of what we call the "phrase-unit" of thought and expression. (This term is used in the rhetorical and not the grammatical sense; it may be a phrase or an entire clause or a single word.) This analysis is to be done when the pupil first reads aloud the paragraph or sentence and, by his "breaking" the thought, shows us that he only partially grasps the meaning. Let us do this part of the work deliberately that the pupil may have time to absorb and make his own the "knowledge, wisdom, and joy" that is held for him in the printed page.

The thought is also often broken by the child's effort to "read with expression." Let our aim be to get *thoughtful* reading rather than "reading with expression." In the matter of *delivery*, lead the pupil to see that plain matter-of-fact statements and explanatory matter should be read in a natural "speaking" manner; reading in this case is simply telling. In conversation the conversational tones and inflections should be used but not *exaggerated*. In reading selections dealing with sentiment and the higher emotions, do not try to have the pupil read with *adult* inflection and emphasis from imitation or lead-

ing questions; rather stimulate *him* to *feel intensely* within his own range and then express what *he feels*.

Let us strive continually for correct pronunciation and pure and distinct enunciation. The latter should be made a special point in all the phonic work.

The last step will be the *Reading of the Selection as a Whole*. Here let the effort be to have the class read the story through with as little interruption as possible, so as to finish with the view of the whole and thus complete the cycle.

In the reading of poems let each one be, so to speak, a law unto itself. Direct all energies to the stimulation of the higher emotions through an understanding of and sympathy with the subject-matter, to the appreciation of the beauty of thought and expression, to feeling delight in the movement, and to the enjoyment of the rhythm and melody.

Extensive Reading is a correlative of the Intensive Reading and accomplishes, on the one hand, familiarity with books and an increase in vocabulary, and on the other hand fluency in reading, which, analyzed, comprises (1) the rapid recognition of words in sentences, (2) the ability of eye and mind to look ahead, which results in facility in reading collections of words, and (3) that habit of mind which finally leads to the grasp of a whole paragraph, or page even, at a glance.

At an early date in the first term begin the reading in the Supplementary Readers. In some schools it would be well to take the Supplementary Readers of the grade below for this first work. In foreign schools or backward classes the pupils might be given time to read over to themselves at least a part of the selection. This is but a step to the real sight reading which should be given at first once a week, and oftener later, from the Supplementary Readers. There should also be sight reading occasionally from the regular readers.

In reading to the classes be guided by the suggestions in the Course of Study, though not confined to it. Let your choice measure up to the standard of those found there.

The pupil in the Fourth Grade is in a transition period between infancy and youth; his ideals of life are just taking shape, his interests are widening, new sensations and sentiments are awakening and demanding recognition. It is a period of grave responsibility for parent and teacher and in many cases the teacher must shoulder the responsibility of both.

The expansion of interests must be met in the school and a rivalry set up against outside distractions; ideals must be formed on highest models; the emotional development guided in channels of safety. What the child reads enters largely into this. The selections in your Fourth Reader were specially chosen to meet this exigency, but they are only the starting points or guide-posts in the way. What the child learns to love to read and what he chooses to read are the important things.

Will you not, dear fellow workers, meet this responsibility by seeing to it that each boy and girl under your care reads at least *two* good, wholesome books this year? President Eliot says, "The uplifting of the masses depends upon the implanting in the schools a taste for good reading." Thus is our civic duty, as well as our professional responsibility, made plain to us.

COMPOSITION WORK FOR THE PRIMARY GRADES *

I. GENERAL VIEW

Aim and Purpose.—The aim of the work in composition should be to bring about a closer correlation between this and the information and culture studies, for the combined purpose of making the work of each more effective and of greater advantage to the other.

Principles.—While we all recognize that composing is one of the most important agencies in developing power to think and in attaining mastery of expression, we do not always sufficiently realize that it is one of the greatest instrumentalities in the acquisition of knowledge: first, because to write a thoroughly good composition on any subject requires a comprehensive view of it as a whole, a full and exact knowledge of detail, a discriminative appreciation of essentials, and a clear understanding of the inter-relation of its facts; secondly, the effort to write upon a subject forces the mind to formulate in more or less clear, definite statement one's knowledge of the facts, this having the reactive effect of clarifying one's ideas, of exposing and correcting erroneous notions.

Plan of Work.—The composition work will include the two phases — the composition exercises and the inventive composition. The composition exercises, which are based upon the information studies, should be of almost daily occurrence, supplementing the oral work in those studies. One language period per week will, according to schedule, be devoted exclusively to written work in composing. Three weekly exercises will consist of short reproductions of the instruction work, reproductions, more or less close, of stories

*[From a handbook of suggestions on the teaching of English, used to accompany the Course of Study in the Cleveland schools.]

and poems, etc., read or told in illustration of the various lessons, or in connection with the literature, short narrations and descriptions, records of observations, etc. They will constitute practice exercises in composing, and will train for the inventive composition.

The inventive composition will be given whenever any one of the subjects under consideration affords special opportunity. Some subject or phase of a subject being rounded up in the mind of the pupil, the facts having been so presented and so unified that he possesses certain definite knowledge of the subject or phase, which by mental assimilation has become his view of it, and which he is able to give out in the logical, completed form of expression termed "a composition."

Sufficient time may be given to the writing of this composition by combining the weekly composition period with that of some one of the other branches, each in turn being thus displaced by the composition. These compositions should come as often as once in two or three weeks, amounting to from fifteen to eighteen during the year. Both the composition exercises and the composition will constitute practice and training in the two most important forms of English composition,—narration and description. Practice in descriptive composition should follow the three lines, description by parts, description by attributes, and description by both parts and attributes. Narrations should begin with the most elementary relation of incidents or facts, and rise by degrees to "story-telling." Greatest care will have to be exercised by the teacher to keep these pure in style at first, or descriptions will almost inevitably intrude into narrations and *vice versa*, and if unskillfully combined, confusion of style and obscurity of statement will result. Therefore, it is desirable that both teacher and pupils enter into a special study of these two forms, to the end that the pupils may readily distinguish between them and acquire the skill to write in either form as directed. When, however, this skill has been attained, then the pupils may be given practice in using the combined forms, but should then

be able to analyze their own compositions, to distinguish **each** form wherever used, and be able to perceive the reason for its use.

Subject-Matter.—To admit the important bearing of the composition work on the information studies brings us to the inevitable conclusion that the former can and should be used as a constituent part of the instruction in the information studies wherever possible. Those we find most adaptable to this concentration are grouped, in the course of study, under the heading, "Language Work," and include that round of knowledge studies which naturally form the main part of the child's instruction, comprising, as they do, a study of the natural world around him and of the peoples and social institutions which furnish the human interest. They are Nature Study (plant and animal), Physiology, Geography, History and Civics, Conduct and Morals, and Literature.

As the work of each grade constitutes simply a part of a whole, it is self-evident that the teacher should be entirely familiar, not only with her own part of the work, but with the entire course of composition. She should be informed not alone as to its theory, but also as to the practical application in detail. She should know the foundation of every single phase of her own work, and also, that her own work should fulfill its appointed purpose, she should have an appreciative knowledge of future development of its every phase.

II. FOURTH GRADE COMPOSITION WORK

The pupils entering the Fourth Grade should be able to write good descriptions and narrations of a simple character and within the limitations of their knowledge and vocabulary. There should be a fair degree of merit and correctness in the logical arrangement of ideas and construction of sentences, and also in the detail of spelling, punctuation, capitals, penmanship, etc.

Plan of Work.—Teachers, whose pupils fail to reach the standard of requirement stated above, should review accord-

ing to the methods of the Third Grade. Several tests will probably be necessary to bring out the points in which her class need special review; these having been ascertained, and specific instruction and training having brought the quality of work of the class fairly up to the standard, the teacher will begin her training according to the methods adapted to this grade. The methods of correlation of the composition work with the information studies will differ from those of the three previous grades in two or three essentials.

In the first place, the information, naturally and properly, rapidly outruns both the opportunity and ability of the pupils to reproduce it in written form. Nevertheless the oral or instructive work will be made to a certain degree, and at certain stages to conform to the necessities of the written work. That is, there will be frequent written exercises based upon the daily work in Nature Study, History, Geography, etc., etc. Some phase of the work in each of these branches which can naturally and properly be made the subject of a written exercise being so presented as to afford opportunity for a "composition exercise." In such instances the teacher will lead the pupils, in the oral recitation, to make a summary of the particular phase of the subject under consideration in a logically arranged, clear, succinct statement, showing due appreciation of essentials and omitting unimportant details.

This work will form the basis of a "composition" more or less extended. It may take the character of a mere "exercise" of a single incident or object, or a simple phase of a subject, as, for instance, the description of a stalk of corn, or of the Monitor; or it may be of much wider scope, being based on the instruction covering a more or less wide field, and being the natural rounding up of a course of lessons. Such as, for instance, the summary of the information they have gathered about grains; or the series of events which led up to the triumph of the Monitor. These latter will be inventive compositions and may require longer time, but in either case, whether in the "exercise" or the more formal "composition," the pro-

duct should be complete in itself, and not fragmentary in character.

Much practice must be given in writing pure descriptions, and pure narrations, before the pupils are given subjects in which both are naturally combined. When, however, they have attained a fair degree of skill in each, they may be given a larger freedom in selecting what to write. Descriptions will frequently be introduced into the narrations, and properly so, but at this stage of his progress the pupil should introduce these consciously and purposely. He should be trained to critically analyze, first, models, and then his own composition, in order to be able to distinguish between the two forms of composition, the narrative and descriptive. He should be given special exercise for practice in combining them with skill and judgment. Descriptions will take on the character of description by parts and by attributes, and much practice given to description of people, in which character sketches form a part. Models for these should be studied with much care, to give the pupils a standard of excellence. In narrations, the originality and individuality of the pupil will have free scope. Care should be exercised to guide rather than control, looking more to the growth in power of self-expression, and making the manner of expression of secondary importance in this instance. In this, however, as in every case, the pupils should be required to pay strict attention to correctness of spelling, punctuation, use of capitals, penmanship, and appearance of manuscript.

WHAT IS "SCIENTIFIC" METHOD IN THE STUDY OF EDUCATION?

EDWARD L. THORNDIKE

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The facts with which the student of education deals—changes in human beings and the causes thereof—have in many cases already been subjected to scientific treatment in the allied sciences of physiology, psychology, sociology and economics. In the case of such facts, the student of education may consider himself and his work scientific when he and it are approved by the experts in these several sciences. If they do not know what is scientific in their respective fields, none does.

In many cases, however, the problems of education are so specialized that their scientific warrant can come only from within. The rule, then, is that what the expert in the science of education deems scientific has the greatest probability of being so. The difficulty with the rule is that in education one cannot be sure of the expert. Consequently one must fall back upon the experience of science in general.

This announces clearly that power of correct prophecy is the test of scientific knowledge and that verifiability by any competent observer is its diagnostic symptom. In so far as our judgments permit correct prophecy, we may be confident that they tally with objective fact; in so far as our methods permit any competent student to repeat every step of our observations and experiments, we may be confident that they are honest.

There are, however, many stages on the road to a statement of fact or law testable by its power to predict the future. Science starts in mere notions or guesses made as a result of impartial observations; it is elaborated into careful hypotheses in consideration of all the evidence at hand; it is developed by ingenuity in observation and experiment and by sagacity in

inference; it is crowned by adroitness and patience in verification. That work may be scientific which provides only the fruitful guess; or only the ingenious apparatus; or only the sagacity of inference; or only the patient toil of repeating others' experiments. The final test of the scientific quality of the notions we have, the hypotheses we frame, the experiments we devise, the records we take, and the like, is of course their power to progress toward verification and prophecy and control. But this test cannot be applied in advance; the only practical test, here, as always, is the judgment of the best experts to be found.

In the present condition of our science about all that can helpfully be said to its workers with respect to scientific method is that he has the greatest probability of doing scientific work in education who is by nature a scientific mind; who studies and practices the methods of the allied sciences with success; who heeds the obvious warnings of logic and scientific method in general; and who estimates all opinions about education in the light of their verifiability.

The reader will have observed that I have carefully avoided stating any fixed criteria of method by which a student of education may rate his work. Only an expert in the science of education has the right to formulate such criteria of method. And even in the case of the expert, the history of science shows that such criteria are either so obvious as to be futile or else are constantly outgrown or even repudiated by the growth of science. It is not discussion of scientific method that produces scientific work; it is rather a process of selection in scientific work that produces whatever useful ideas we have about methods. An ounce of love for fact, inventiveness and scientific ambition is worth a ton of talk about what is scientific. *Fit faber fabricando.*

REPORT OF THE SECRETARY

I. MINUTES OF THE MEETINGS HELD AT ASBURY PARK

(July 3 and 5, 1905)

Monday, July 3.—President Edwin G. Dexter, called the meeting to order and announced the subjects before the Society for discussion.

Motion carried to take up the papers in their order in the *Yearbook*, beginning with Supt. J. Stanley Brown's presentation of the place of commercial work in the high school.

Motion carried that a time limit of five minutes be fixed for discussion at any one time, writers of papers excepted.

Superintendent Brown opened the discussion by presenting concisely the essential things his paper stood for.

There was a good attendance of members, many of whom took part in discussion. Those who participated were C. P. Cary of Wisconsin, Burks of New Jersey, Felmiey of Illinois, Kirk of Missouri, Noss of Pennsylvania, Seeley and Broome of New Jersey, Holmes of Illinois, Kratz of Michigan, Halleck of Kentucky, and J. W. Cook of Illinois.

The discussion was vigorous and much to the point, but gave minor details a somewhat undue prominence in proportion to the rationale of the commercial courses in public secondary schools and reasons for the liberal motive and enlarged provision for these courses.

(Mr. Brown's paper has since been republished by a large business company that is interested in the movement for liberal and efficient commercial education.)

Motion carried that Dr. Charles A. McMurry's paper on the training of secondary teachers be next considered.

The secretary stated the main thesis of the paper. This was followed by a spirited discussion led by Dr. DeGarmo, of Cornell University. The author's position was vigorously assailed at several points by various members present; but his

main contention, namely, that the training of secondary teachers calls for practice teaching under expert criticism in universities as well as in normal schools, stood firm. Yet serious obstacles and objections to such training were pointed out, showing some peculiar difficulties of the problem, and making it clear that the problem is far from being solved.

Wednesday, July 5.—The committee on re-naming submitted the following:

Your committee appointed to make recommendations concerning the re-naming of this society made numerous inquiries and invited suggestions as to a more appropriate name. While all who responded were agreed that relief from our present lengthy name was desirable, yet there was no such unanimity expressed in choice of name.

Since the committee did not unite on the same name, the chairman, in the absence of the other members of the committee, deems it wise to report several of the most popular names and simply indicate the preference of two of its members:

The American Education Society, The American Education Club, The National School Masters' Club, The National Society of Education, The National Society for Educational Research, The National Society for Educational Investigation, The American Society for Educational Research.

Because of brevity and the retention of the larger part of the present name of the Society, two of the committee are in favor of adopting the name, The National Society of Education.

Respectfully submitted,

H. E. KRATZ,
Chairman of Committee.

Motion carried to postpone final action on the report of committee on re-naming until action should be taken on the question of affiliation with the American Association for the Advancement of Science; and the question of re-naming was referred back to the committee for further consideration to report at the February meeting, 1906.

Motion carried authorizing the Executive Committee to organize committees for work as suggested on pages 77-78 of the *Fourth Yearbook, Part. II.*

Request was made to have the *Yearbook* sent to members four weeks before the time of the meeting at which it is to be discussed.

Then followed a discussion of manual training and domestic science in secondary education, discussion being based upon the papers by Gilbert B. Morrison, and Ellen H. Richards.

Following the advice of the Society, the Executive Committee has begun organizing committees for making such investigations and reports as can be made better by committees than by individuals. The committee on college-entrance credit for vocational courses is already organized and well started in its work. Others are in process of formation.

The committee working on the problem of college credit for vocational courses are C. A. Herrick, Central High School, Philadelphia; Paul H. Hanus, Harvard University; W. J. F. Bryan, Central High School, St. Louis; A. S. Whitney, University of Michigan; and Principal Prettyman, Horace Mann High School Teachers' College, Columbia University.

II. NOTICES TO ACTIVE MEMBERS

Conduct of Meetings.—There are three well defined aspects of the characteristic work of the National Society for the Scientific Study of Education—

1. The study and scientific investigation of problems, both theoretical and practical, by members in their respective fields of work.
2. The publication of the results of some of such studies in the *Yearbook* of the Society.
3. The discussion of these published studies at the regular meetings of the Society and at smaller local gatherings.

The National Society ought not to underestimate the value of this third aspect; we should not forget that the nature and purpose of our Society demand a plan and conduct of our discussions that will have the dignity of logical order, effectiveness, and really valuable outcome.

Yet such a standard cannot be reached and maintained unless the Society addresses itself seriously to the problem, and every member gives his earnest and loyal co-operation.

There are several things that will help make our meetings of this high and effective character :

1. The place of meeting should be as convenient as possible for members, but not such as will make it easy for anyone to drop in out of mere curiosity. A large, miscellaneous audience is detrimental to the order, freedom and effectiveness of discussion.

2. Admission to the meetings (excepting general open meetings) should be by personal identification or by certificate of membership.

3. It ought to be better understood that those eligible to enter the meetings are (a) members—both active and associate; and (b) guests—those invited by the officers as guests of the Society, and those invited by active members as personal guests. Occasional open meetings may be desirable.

4. There should be provision for definite and progressive discussion; this, however, should never lessen the freedom or limit the opportunity of any member to take part in the discussion.

5. Any member who wishes to discuss some particular topic or aspect of the subject before the Society, or have such topic discussed, should not fail to so inform the Secretary in advance of the meeting and that topic will be taken up in its logical order or given a special place.

6. The time limits for discussions cannot be determined in advance of a meeting; but experience has proved that both necessity and justice may require a limit to the number of times a member may speak, and to the length of his remarks.

7. Non-members should be granted the floor only upon invitation or permission.

8. The presiding officer needs to indicate the scope and order of the discussion, and then enforce strict adherence to this, unless the Society instruct him otherwise.

All of the above suggestions are derived from our past experience as necessary means to the conduct of meetings of a high order of excellence. It is urged that each member watch

this matter with care until the National Society becomes a synonym for effective and valuable meetings.

Business Meetings.—The meeting on Monday afternoon, February 26, will be for Active Members only. Important matters touching the policy, work and conduct of the Society will be considered.

Wednesday, February 28, at 4 p. m., the last session will be held. Unfinished business will be considered and officers elected. Also at this meeting the discussion of the *Yearbook* will be continued.

Membership and Dues.—To accommodate members a name is retained on the membership list until the Secretary gets notice to discontinue it. The general business management of the Society also requires that this practice be maintained.

Miscellaneous—The open meeting at 7:45 p. m., Monday, will no doubt be a very large one. It is therefore urged that Active Members gather as near together as possible at the front, else questions and give-and-take conversation will be lost or impossible.

The First Christian Church, where the meetings for members only will be held, is at the corner of Fourth and Walnut streets. The Warren Memorial Church is at Fourth and Broadway.

Nominations for active membership should be sent to the Secretary, or handed to some member of the Executive Committee before 3 o'clock p. m., Monday, February 26.

The Seelbach Hotel will be the headquarters of the Society.

Those members who do not attend the Louisville meetings are urged to take up a study of the *Yearbook* in local round-table discussions.

M. J. HOLMES, *Secretary*.

III. FINANCIAL STATEMENT

M. J. Holmes, Secretary-Treasurer, in account with The National Society
for the Scientific Study of Education:

Debits—

| | |
|---|----------------|
| To cash balance as per statement Feb. 25, 1905..... | \$233 88 |
| To membership dues Feb. 25, to Dec. 30, 1905..... | 301 00 |
| To sales of books, etc..... | 12 20 |
| | <hr/> \$547 08 |

Credits—

| | |
|---|----------------|
| By printing and stationery..... | \$162 20 |
| By office help and supplies..... | 64 30 |
| By traveling expenses..... | 69 98 |
| By cash to Univ. of Chicago (See items and checks) .. | 60 28 |
| By postage and express..... | 32 81 |
| By telephone and telegraph..... | 3 55 |
| | <hr/> \$393 12 |
| Balance due the National Society..... | \$153 96 |

The University of Chicago Press, in account with The National
Society for the Scientific Study of Education:

Statement for Quarter Ending December 31, 1905.

Debits—

| | |
|---|---------|
| Balance due University of Chicago Press per statement of September 30, 1905..... | \$78 36 |
| To reprint 500 Second Supplement to <i>First Yearbook</i> , invoice December 30, 1905..... | 32 25 |

\$110 61

Credits—

By cash November 4, 1905.....\$ 50 00

By sale of publications—

October\$79 24

November 17 27

December 23 62

\$120 13

Less returns 5 00

\$115 13

Less 15 per cent..... 17 27 97 86 147 86 \$ 37 25

Balance standing to the credit of the Society Dec. 31, 1905.....\$191 21

CONSTITUTION
OF
THE NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY
OF EDUCATION

[REORGANIZED NATIONAL HERBART SOCIETY]

ARTICLE I.—ITS OBJECT

The name suggests the general purpose of the society. It contemplates a serious, continuous, intensive study of educational problems. It stands for no particular creed or propaganda. In aim and spirit and method it seeks to be scientific.

ARTICLE II.—PLAN OF ORGANIZATION

SECTION 1. *Members.*—(1) The society consists of active and associate members.

(2) *Active Members.* The active members shall, for the present, be limited to one hundred. [This limit is now removed.] Only active members may take part in the discussions.

(3) The chief qualification for active membership shall be the possession of time, ability, and inclination to undertake a serious scientific study of educational problems. A fee of three dollars per year for each active member will be charged.

(4) Election to active membership is by a majority vote of the active members present.

(5) *Associate Members.* Anyone may become an associate member by paying a yearly fee of one dollar. Such members shall be entitled to receive the publications of the society and to attend its public meetings.

SEC. 2. *Officers and Committees.*—The officers of the society shall consist of a president, a secretary-treasury, and an executive committee, who shall be elected yearly at the winter session of the society. The executive committee shall consist of the president, the secretary-treasurer, and four other active members of the society, of whom two are to be elected each year at the winter meeting. It shall be the duty of the executive committee to carry into effect the will of the active membership respecting the subjects to be discussed at its meetings, the matter which is to appear in its publications, and to present at each meeting names of suitable candidates for admission to active membership.

SEC. 3. *Publications.*—(1) The society shall publish "The Yearbook of the National Society for the Scientific Study of Education," and such supplements as it sees fit to add.

(2) The time of publishing the yearbook or supplements shall be determined by the committee.

(3) These publications shall be sent to the active and associate members of the society.

ARTICLE III

SECTION 1. *Time and Place of Meeting.*—(1) This society shall meet twice a year.

(2) One of these meetings shall be in connection with, and at the same time and place as, the National Educational Association; the other in connection with, and at the same time and place of meeting as the Department of Superintendence.

(3) All the details of these meetings shall be determined by the executive committee.

ARTICLE IV

This constitution may be amended at any regular winter meeting by vote of two-thirds of the active members present.

ACTIVE MEMBERS OF THE NATIONAL SOCIETY FOR THE
SCIENTIFIC STUDY OF EDUCATION *

- Edwin A. Alderman, president University of Virginia, Charlottesville, Va.
Zonia Baber, School of Education, Chicago, Ill.
Frank P. Bachman, Ohio University, Athens, Ohio.
William C. Bagley, State Normal School, Dillon, Mont.
C. M. Bardwell, superintendent of schools, Aurora, Ill.
R. H. Beggs, Whittier School, Denver, Colo.
Ezra W. Benedict, principal of high school, Warrensburg, N. Y.
Francis G. Blair, State Normal School, Charleston, Ill.
Frederick E. Bolton, Iowa State University, Iowa City, Iowa.
Richard G. Boone, editor *Education*, 80 Bruce avenue, Yonkers, N. Y.
Eugene C. Branson, president State Normal School, Athens, Ga.
Francis B. Brandt, Central High School, Philadelphia, Pa.
Sarah C. Brooks, principal Baltimore Teachers' Training School, Baltimore, Md.
Stratton D. Brooks, superintendent of schools, Cleveland, O.
Edwin C. Broome, superintendent of schools, Rahway, N. J.
Elmer E. Brown, University of California, Berkeley, Calif.
George P. Brown, editor *School and Home Education*, Bloomington, Ill.
John F. Brown, University of Wyoming, Laramie, Wyo.
J. Stanley Brown, superintendent Township High School, Joliet, Ill.
Martin G. Brumbaugh, University of Pennsylvania, Philadelphia, Pa.
William L. Bryan, president Indiana University, Bloomington, Ind.
W. J. S. Bryan, Central High School, St. Louis, Mo.
George V. Buchanan, superintendent of schools, Sedalia, Mo.
Edward F. Buchner, University of Alabama, University, Ala.
Jesse D. Burks, City Training School, Albany, N. Y.
W. H. Burnham, Clark University, Worcester, Mass.
B. C. Caldwell, president Louisiana State Normal School, Natchitoches, La.
W. T. Carrington, state superintendent, Jefferson City, Mo.
Clarence F. Carroll, superintendent of schools, Rochester, N. Y.
C. P. Cary, state superintendent, Madison, Wis.
Charles E. Chadsey, superintendent of schools, Denver, Colo.
W. H. Cheever, State Normal School, Milwaukee, Wis.
P. P. Claxton, University of Tennessee, Knoxville, Tenn.
David E. Cloyd, 541 West 123d St., New York, N. Y.
Alexander B. Coffey, Madison, Wis.
John W. Cook, president State Normal School, De Kalb, Ill.
Flora J. Cooke, Francis W. Parker School, Chicago, Ill.

*It is assumed that a member wishes to continue membership until he notifies the Secretary of his withdrawal.

William J. Crane, superintendent of schools, Marshalltown, Iowa.

Ellwood P. Cubberly, Leland Stanford University, Stanford University, Calif.

Frank M. Darling, Chicago Normal School, Chicago, Ill.

Wm. M. Davidson, superintendent of schools, Omaha, Neb.

Washington S. Dearmont, president State Normal School, Cape Girardeau, Mo.

Charles DeGarmo, Cornell University, Ithaca, N. Y.

John Dewey, Columbia University, New York, N. Y.

Edwin G. Dexter, University of Illinois, Urbana, Ill.

Richard E. Dodge, Columbia University, New York, N. Y.

F. E. Doty, High School Inspector, Madison, Wis.

Augustus S. Downing, Education Department, Albany, N. Y.

F. B. Dressler, University of California, Berkeley, Calif.

Charles B. Dyke, Oracle, Ariz.

Gertrude Edmund, Lowell Training School, Lowell, Mass.

A. Caswell Ellis, University of Texas, Austin, Tex.

W. H. Elson, superintendent of schools, Grand Rapids, Mich.

Frederic E. Farrington, University of California, Berkeley, Calif.

David Felmley, president Illinois State Normal University, Normal, Ill.

Frank A. Fitzpatrick, 93 Summer street, Boston, Mass.

George M. Forbes, Rochester University, Rochester, N. Y.

J. M. H. Frederick, superintendent of schools, Lakewood, Ohio.

J. M. Frost, superintendent of schools, Waukegan, Mich.

Charles B. Gilbert, 1170 Broadway, New York, N. Y.

Newell D. Gilbert, superintendent of schools, DeKalb, Ill.

Wilbur F. Gordy, superintendent of schools, Springfield, Mass.

Maxmilian P. E. Groszmann, Groszmann School, Plainfield, N. J.

W. H. Hailman, Chicago Normal School, Chicago, Ill.

Reuben Post Halleck, Boys' High School, Louisville, Ky.

Rufus H. Halsey, president State Normal School, Oshkosh, Wis.

Paul H. Hanus, Harvard University, Cambridge, Mass.

Ada Van Stone Harris, supervisor kindergarten and primary grades, Rochester, N. Y.

W. H. Hatch, superintendent of schools, Oak Park, Ill.

Mrs. Josephine W. Heermans, principal Whittier School, Kansas City, Mo.

J. W. Henninger, Macomb, Ill.

Walter L. Hervey, Park avenue and Fifty-ninth street, New York, N. Y.

Edgar L. Hewett, U. S. National Museum, Washington, D. C.

Albert Ross Hill, Missouri Teachers' College, Columbus, Mo.

Florence Holbrook, Forestville School, Chicago, Ill.

Manfred J. Holmes, Illinois State Normal University, Normal, Ill.

Wilber W. Howe, superintendent of schools, Whitehall, N. Y.

Wilbur S. Jackman, University of Chicago, Chicago, Ill.

Walter Ballou Jacobs, Brown University, Providence, R. I.

Jeremiah W. Jenks, Cornell University, Ithaca, N. Y.

- Lewis H. Jones, president State Normal College, Ypsilanti, Mich.
Grant Karr, City Training School, New York, N. Y.
John A. Keith, State Normal School, DeKalb, Ill.
Calvin N. Kendall, superintendent schools, Indianapolis, Ind.
John R. Kirk, president State Normal School, Kirksville, Mo.
Henry E. Kratz, superintendent of schools, Calumet, Mich.
Ossian H. Lang, editor, 61 E. Ninth street, New York, N. Y.
Isabel Lawrence, State Normal School, St. Cloud, Minn.
Homer P. Lewis, superintendent of schools, Worcester, Mass.
George H. Locke, University of Chicago, Chicago, Ill.
L. C. Lord, president State Normal School, Charleston, Ill.
Charles D. Lowry, district superintendent of schools, Chicago, Ill.
G. W. A. Luckey, University of Nebraska, Lincoln, Neb.
Herman T. Lukens, State Normal School, California, Pa.
E. O. Lyte, president State Normal School, Millersville, Pa.
John A. MacVannel, Columbia University, New York, N. Y.
David R. Major, State University, Columbus, Ohio.
C. E. Mann, superintendent of schools, Batavia, Ill.
Frank A. Manny, Ethical Culture School, Central Park, West and Sixty-third street, New York, N. Y.
Elizabeth Mavity Cunningham, State Normal University, Normal, Ill.
Guy E. Maxwell, president State Normal School, Winona, Minn.
Wm. H. Maxwell, superintendent of schools, New York, N. Y.
Arthur N. McCallum, superintendent of schools, Austin, Tex.
Charles McKenny, president State Normal School, Milwaukee, Wis.
Charles A. McMurry, State Normal School, California, Pa.
Frank M. McMurry, Columbia University, New York, N. Y.
I. C. McNeill, president State Normal School, West Superior, Wis.
G. R. Miller, State Normal School, Greeley, Colo.
Wm. A. Millis, superintendent of schools, Crawfordsville, Ind.
J. F. Millsbaugh, president State Normal School, Los Angeles, Calif.
Paul Monroe, Columbia University, New York, N. Y.
Will S. Monroe, State Normal School, Westfield, Mass.
Ernest C. Moore, University of California, Berkeley Calif.
George A. Newton, superintendent of schools, Greenville, Texas.
Theodore B. Noss, president State Normal School, California, Pa.
M. V. O'Shea, University of Wisconsin, Madison, Wis.
Simon N. Patten, University of Pennsylvania, Philadelphia, Pa.
George D. Pickels, State Normal School, Natchitoches, La.
Rosalie Pollock, Primary Supervisor, Salt Lake City, Utah.
R. R. Reeder, Hastings-on-Hudson, N. Y.
J. F. Reigart, 109 W. Fifty-fourth street, New York, N. Y.
Emily J. Rice, School of Education, Chicago, Ill.
C. R. Richards, Columbia University, New York, N. Y.
R. N. Roark, Kentucky University, Lexington, Ky.
Stuart H. Rowe, Brooklyn Training School for Teachers, Prospect Place near Nostrand avenue, Brooklyn, N. Y.

- J. E. Russell, Columbia University, New York, N. Y.
Myron T. Scudder, principal State Normal School, New Paltz, N. Y.
Levi Seeley, State Normal School, Trenton, N. J.
Homer Seerley, president State Normal School, Cedar Falls, Iowa.
Burgess Shank, State Normal School, Valley City, N. D.
James J. Sheppard, principal High School of Commerce, New York, N. Y.
Waite A. Shoemaker, president State Normal School, St. Cloud, Minn.
Henry W. Shryock, State Normal University, Carbondale, Ill.
Herbert M. Slauson, superintendent of schools, Ann Arbor, Mich.
David E. Smith, Columbia University, New York, N. Y.
David S. Snedden, Leland Stanford Jr. University, Stanford University, Calif.
Gerard T. Smith, superintendent of schools, Moline, Ill.
Z. X. Snyder, president State Normal School, Greeley, Colo.
F. Louis Soldan, superintendent of instruction, St. Louis, Mo.
John K. Stableton, superintendent schools, Bloomington, Ill.
Edward D. Starbuck, Earlham College, Richmond, Ind.
William E. Stark, Ethical Culture School, New York, N. Y.
W. S. Sutton, University of Texas, Austin, Texas.
Joseph S. Taylor, district superintendent, 2275 Aqueduct Ave., New York, N. Y.
Edward L. Thorndike, Columbia University, New York, N. Y.
Charles H. Thurber, editor, Ginn & Co., Boston, Mass.
A. W. Tressler, University of Wisconsin, Madison, Wis.
C. C. Van Liew, president State Normal School, Chico, Calif.
Jas. H. Van Sickle, superintendent of schools, Baltimore, Md.
Dwight B. Waldo, president State Normal School, Kalamazoo, Mich.
Elmer W. Walker, superintendent State School for Deaf, Delavan, Wis.
Sarah J. Walter, Hampton Institute, Hampton, Va.
A. S. Whitney, University of Michigan, Ann Arbor, Mich.
John J. Wilkinson, Elmhurst, Ill.
J. N. Wilkinson, president State Normal School, Emporia, Kan.
L. E. Wolfe, superintendent of schools, San Antonio, Texas.

without giving evidence of possessing some real knowledge of the more important high-school subjects. Algebra, general and English history, English literature, physical geography, and at least one science, is a minimum that might be expected. As fast as is possible, every state should move toward making this minimum an absolute requirement for any grade of certificate to be issued. This must be accomplished by gradually cutting off the lower grades of certificate. A first-grade certificate ought to place a premium upon obtaining a high-school education, or its equivalent by private study, and it ought not to be given alone on the basis of a certain number of years of experience as a teacher and the obtaining of high percentages in a new examination, covering those common-school branches on which the candidate originally passed and which he has been teaching continuously to pupils. The teacher who cannot rise above this level ought not to receive a first-grade certificate, and ultimately must be eliminated entirely from the work of teaching.

II. GRADES OF CERTIFICATES

In the grades of certificates issued by the local authorities the number ranges from one to four, three being the most common number and being used by more than one-half of the states issuing graded local certificates. Six states issue as many as four grades, while California has reduced the number of certificates for elementary schools to one by gradually raising the educational requirements for admission to the work of teaching, and thus cutting off and eliminating all of the lower grades of certificates. In this state admission to the teaching profession requires either a normal-school training or a three-day written examination over subjects which practically require that the applicant shall have had a high-school education to pass.¹

In about one-half of the states granting three or more grades of

¹ "County boards of education may, on examination, grant certificates as follows: Grammar-school certificates: to those who have passed a satisfactory examination in the following studies: reading, English grammar and advanced composition, English and American literature, orthography and defining, penmanship, drawing, vocal music, bookkeeping, arithmetic, algebra to quadratics, plane geometry, geography (physical, political, and industrial), elementary physics, physiology and hygiene, history of the United States and civil government, general history, school law, and methods of teaching."—*California Political Code*, sec. 1772.

certificates, an examination in additional subjects is not required to secure a second-grade certificate instead of a third-grade certificate, and in about one-third of the states granting two or more grades of certificates an examination in additional subjects is not required to secure a first-grade instead of a second-grade certificate. In these states the basis for granting the higher grade of certificate is, not additional preparation, but higher percentages made in the examinations.⁴ About two-thirds of the states impose a teaching experience requirement before granting the highest grade or grades of local certificate.⁵

Though most of the states provide for two or more grades of certificates, it can hardly be said that we have a graded system of certification, leading from lower to higher certificates, except in those states where additional education or examinations are required for the higher grades. This is the case in only about one-half of the states, and in many of these the system is imperfect. Kentucky,⁶ for example, with its grades of certificates based wholly on percentages, cannot be said to have a graded system of certification in any real sense of the term. Nebraska⁷ and Missouri,⁸ on the other hand, have a real graded system.

⁴ Kentucky is a good example of this. The law here provides that three grades of county certificates shall be issued, based on the following grades: first-class certificate: average, 85 per cent. or over; minimum grade in any subject, 65 per cent.; second-class certificate: average, 75 per cent.; minimum grade, 55 per cent.; third-class certificate: average, 65 per cent.; minimum grade 50 per cent.—*School Law of Kentucky*, 1904 edition, sec. 133, p. 100.

⁵ Minnesota is an example of this class of states, the law providing that "no teacher shall receive a complete first-grade or second-grade certificate who has not had successful experience in teaching for at least eight months for a first-grade, and five months for a second-grade."—Minnesota: *Acts of 1901*, chap. 160, sec. 1; *School Law*, sec. 265.

⁶ See footnote 4 above.

⁷ In this state the law (*School Law of Nebraska*, Subdiv. 9 a, secs. 7, 8, 9) establishes the following standards for the three grades of county certificates:

1. For the third-grade certificate: "Approved moral character and a satisfactory examination in orthography, reading, penmanship, geography, arithmetic,

⁸ Missouri has a meritorious graded system which incorporates the main features of both the Kentucky and Nebraska plans. Additional subjects are required for each higher grade of certificate (three grades are issued in Nebraska), and in addition the law requires that "to obtain a first-grade certifi-

In a number of states the lowest grade of certificate is regarded merely as a trial certificate. As such it may perhaps serve a useful purpose. Much will depend upon the attitude assumed toward it by the local certificating authorities. In far too many cases, however, it is a certificate held by the weakest members of the teaching ranks—the immature, the poorly prepared, and the misfits of the teaching profession. In some states this lowest grade of certificate is issued for as short a period as six months, and in at least one state, if the certificate expires before the end of the term, the teacher may continue and finish the term regardless of the lack of a certificate. In a number of states as many as two or three such trial certificates may be granted to the same person, and in a few states there is no express legal prohibition against the granting of any physiology and hygiene, English composition, English grammar, and United States history." (Sec. 9.)

2. For the second-grade certificate: All subjects required for a third-grade, and in addition "civil government, bookkeeping, blackboard drawing, theory and art of teaching, and the elements of agriculture, including a fair knowledge of the structure and habits of the common plants, insects, birds, and quadrupeds." After September 1, 1907, one or more years of successful experience as a teacher, or "at least eight weeks' normal training in a college or university, normal school of approved standing in this or in another state, or in a state junior normal school of Nebraska, or in a high school of Nebraska approved by the state superintendent of public instruction as being equipped to give such normal training," will be required in addition. (Sec. 8.)

3. For the first-grade certificate: All subjects required for the second-grade, and in addition "algebra, botany, geometry, and physics;" and after September 1, 1907, the same additional requirements as for the second-grade except that the minimum period in such training-schools shall be twelve weeks instead of eight. (Sec. 7.)

The Nebraska law contains no express provision whereby the possession of a live certificate of any lower grade shall absolve the applicant for a higher-grade certificate from an examination in the subjects represented by the live lower-grade certificate, as is found in the law of a few states, but with this added provision the Nebraska standards for a graded series of county certificates would be among the best of any state.

cate, applicants shall have had one year's experience in teaching, and shall maintain an average grade of 90 per cent.; to obtain a second-grade, an average grade of 85 per cent.; and to obtain a third-grade, an average grade of 80 per cent.; but no certificate of any grade will be granted to any applicant whose grade in any branch falls below 60 per cent."—*Missouri Revised Statutes*, 1899, sec. 9958, as amended by *Session Acts of 1901*.

number of such certificates to any applicant. Michigan, for example, grants four grades of teachers' certificates and permits three issues in any county of the fourth or lowest grade to any applicant.⁹ When this number is exhausted, the candidate can move over the line to the next county and begin the process over again. Indiana, another state which grants four grades of certificates, prohibits the renewal of the lowest grade¹⁰ (good for but six months), though there is no prohibition against the granting of any number of consecutive third-grade (one-year) certificates. In Arkansas, a state granting a third-grade certificate valid for six months only, we find the unique provision in the law that, if a teacher's "license expires by limitation during any school, such expiration shall not have the effect to interrupt his school, or to debar his claim . . . for the payment of wages."¹¹ Bad as this provision may at first seem, it is only simple justice. If the teacher was prepared to begin the school and teach it for the larger part of the term, he is certainly prepared to finish the term. What should be done is to require the applicant to come up to at least the standard set for the twelve-months' certificate, or not to certificate him at all.

In Minnesota¹² and South Dakota¹³ the county superintendent has power, "when he deems it necessary, to issue a third grade of certificate on his own examination, for a term of one year;" though such certificate, in each state, must designate the particular school district in which it is to be valid, it is not renewable without a new examination, and not more than two such can be granted to the same person in any county. In South Dakota the examination for the third-grade certificate must be given on the subjects required for a second-grade certificate. On the other hand, this third-grade cer-

⁹ "Not more than three third-grade certificates of Class B shall be granted to the same person in any county."—*Michigan Compiled Statutes of 1897*, sec. 4813, as amended by *Session Laws of 1901*, Act 99.

¹⁰ "No person who hereafter receives a six-months' license in any county shall be again thereafter licensed for said county unless he obtains a grade which shall entitle him to receive at least a twelve-months' license."—*School Law of Indiana*, 1903 edition, p. 75.

¹¹ *Arkansas Statutes*, sec. 7649.

¹² Minnesota: *Session Laws of 1899*, chap. 101, sec. 3, as amended by *Laws of 1901*, chap. 160, sec. 1.

¹³ South Dakota: *Revised Code of 1903*, sec. 2294.

tificate may be granted to applicants only seventeen years old, while for the other certificates the applicants must be eighteen years old. This certainly is a bad provision. In Kentucky ¹⁴ a third-grade certificate is granted for one year, but only one such certificate may be granted to the same person in any county, and it has recently been provided ¹⁵ that it shall not be valid for teaching "in any district reporting fifty-five or more pupil (census) children." This virtually limits it to schools having an enrolment of thirty or less children. In Nebraska but one third-grade certificate may be issued to any applicant, it is not valid except in the county where issued, and is valid "for such term as the county superintendent may deem best, but not exceeding one year." ¹⁶ In Idaho, where three grades of certificates are issued, a third-grade cannot be granted to the same person a second time.¹⁷

The general undesirability of these low-grade certificates may be inferred from these limitations, and from the fact that a number of states have abandoned such certificates altogether. Similar citations might be made to the laws of many other states. Almost everywhere the third-grade certificate, or the third- and fourth-grades in certain states, are certificates the existence of which are defensible only on the ground that it is necessary to grant such certificates under the low-wage system which prevails in order to provide a sufficient number of teachers to teach the schools. Such low-grade and low-standard certificates do not provide the schools with the right kind of teachers, and the reason for continuing their existence is economic rather than pedagogical. What the teaching profession should demand is that such low-grade certificates be eliminated without further delay, and that the places of such teachers be taken by teachers of broader education and culture. That this might result in a temporary shortage of teachers is nothing with which the teaching profession need to concern itself, as that is a question for the taxpayers and not the teachers to handle. There will be no serious shortage of teachers in any state under reasonably high standards, if teachers are once paid a yearly salary commen-

¹⁴ Kentucky: *Common School Laws*, 1904, pp. 99, 100.

¹⁵ This took effect on and after July 1, 1894. (*Kentucky Acts of 1893*.)

¹⁶ *School Laws of Nebraska*, subdiv. 9 a, sec. 4, div. 3.

¹⁷ Idaho: *Political Code*, chap. 36, sec. 1028.

surate with the training and ability demanded by the work, and if the conditions of tenure are made reasonably secure. One of the most important services which the teaching profession could render in many states, after the work of instruction, would be the starting of a movement looking toward the entire elimination of these low-standard third- and fourth-grade certificates, and the raising of the educational and professional requirements for the first- and second-grade certificates.

This process of elimination is taking place slowly at present in many parts of the United States. The case of California¹⁸ has been mentioned. Nevada¹⁹ has also begun a similar process by recently providing that the primary county certificate (second-grade) shall not be renewable after the year 1897. In Minnesota and South Dakota the elimination of the third-grade certificate is in process of accomplishment.²⁰ In North Dakota a recent amendment to the Statutes²¹ provides that "after January 1, 1908, county certificates shall be of two grades only," the third-grade, or one-year certificate, being entirely eliminated. In Delaware²² the provisional one-year certificate, which has been the third-grade certificate of that state, was entirely abolished in 1901. In states where the inter-county recognition of certificates is common there is a quite general refusal to recognize a third- or fourth-grade certificate, and in states where certificates are renewable without examination at their expiration, third-grade certificates are almost never so renewable. The movement looking toward the entire abolition of these low-grade certificates is a good movement and it ought to be encouraged. There is no pedagogical reason for their retention, and economic reasons should be referred to those to whom they belong.

¹⁸ This was accomplished in 1901.

¹⁹ *School Law of Nevada*, 1905 edition, p. 27, sec. 7.

²⁰ See footnotes 12 and 13 of this chapter.

²¹ *North Dakota Statutes*, sec. 741.

²² *Delaware: Session Laws of 1901*, chap. 113.

CHAPTER IV

LOCAL EXAMINATION SYSTEMS, CONTINUED: VALIDITY OF CERTIFICATES: NUMBER OF EXAMINATIONS: SPECIAL EXAMINATIONS AND TEMPORARY CERTIFICATES: FEES: RENEWALS

I. VALIDITY OF CERTIFICATES

The length of time for which the different grades of certificates are valid varies in the different states. One year for third-grade, two years for second-grade, and three years for first-grade are quite common periods.¹ In Michigan, Kentucky, and Texas² the first-grade certificate is valid for four years, the second for either three or two years, and the lowest for one year. In Illinois, Iowa, and North Carolina but two grades³ are granted, and these are good for but one and two years respectively. In a few states the period is much longer, as for example Delaware,⁴ where the validity of the first-grade certificate was raised, in 1901, from two up to five years, and that of the second-grade certificate from one up to two years; in Alabama,⁵ where first-grade certificates are valid for six years, second-grade certificates for four years, and third-grade certificates for two years; in Minnesota,⁶ where the first-grade certificates are

¹ Indiana, Missouri, and Nebraska are examples of this. In Nebraska the certificates may be valid for a still shorter time, as the law gives the county superintendent authority to terminate a three-year first-grade certificate at the end of two years, a two-year second-grade certificate at the end of one year, and a third-grade certificate, nominally valid for one year, may be terminated at any time, "at the discretion of the county superintendent of the county in which the holder of such certificate shall teach."—*School Laws of Nebraska*, subdiv. 9a, sec. 4, divs. 1-3.

² Michigan: *Compiled Laws*, sec. 4813, div. 6; *Kentucky Common School Laws*, 1904, edition, sec. 133; *Texas School Laws*, 1905 edition, sec. 85.

³ *School Laws of Illinois*, Art. VII, sec. 3; *Iowa Code*, sec. 2737; *North Carolina Code*, sec. 4162.

⁴ *Delaware Session Laws of 1901*, chap. 113.

⁵ "An Act to establish a uniform system for the examination and licensing of teachers of the public schools of Alabama;" approved February 10, 1899, sec. 15.

⁶ Minnesota: *Session Laws of 1899*, chap. 101, sec. 1; *School Laws*, sec. 263.

valid for five years, and the second-grade certificates for two years; and in California,⁷ where the one elementary-school certificate granted is valid for six years, and is renewable. In Connecticut and Massachusetts the certificate granted by the local school committee is usually valid as long as the teacher remains in the school.

II. NUMBER OF EXAMINATIONS

Quite generally, in recent years, there has been a tendency to reduce the number of examinations given each year so as not to keep the examination door open too continuously. Not many years ago it was a much more general custom than it is today to provide a monthly examination for teachers' certificates, and to give any applicant as many trials as he had dollars to put up on the venture. It was even possible in certain states, and still remains so in a very few, for a candidate to store up grades on subjects in which he did pass, and thus finally secure a certificate by passing on a part of the list at each examination. This usually entitled him to the lowest grade of certificate issued, and enabled him to go out and compete for schools at whatever "wages" the district trustee would pay.

Much of this has been abolished within recent years, and there is today a tendency in most states, though often not very well marked as yet, to reduce the number and to minimize the importance of the examination as a means of recruiting the ranks of the teaching profession. Indiana has recently reduced the number of examinations from twelve to eight per year,⁸ and could still further reduce the number a half to three-fourths with advantage. Iowa and Nebraska⁹ are examples of states which keep the examination mill going twelve months in the year, and the only limit to the persistent applicant's opportunity to try for the lowest grade of certificate is his dollars in Nebraska and his dollar-and-a-halves in Iowa. Texas¹⁰ holds five examinations each year. Quarterly examinations are very common (after-biennial being the most frequent of any number)—Arizona, Arkansas, Illinois, Kentucky, Montana, and North Dakota belonging to this class. California and Idaho have reduced

⁷ *California Political Code*, sec. 1771, divs. 3 and 4.

⁸ *School Law of Indiana*, 1903 edition, p. 75, sec. 81.

⁹ *Iowa Statutes*, sec. 2735. *Nebraska School Laws*, subdiv. 9 a, sec. 11.

¹⁰ *School Law of Texas*, 1905 edition, sec. 76.

the number of examinations still further and provide but one each year.

While perhaps it is not desirable to discriminate among applicants with reference to the number of opportunities anyone may have to try the examinations when offered, it certainly is desirable to limit the number of opportunities to try the examinations each year for all. In proportion as the professional standards of the state are advanced, and as normal- and university-trained teachers increase in number, the examination ought to be decreased in importance. At its very best, it is a very imperfect means of testing the ability of any applicant to teach a school, as everyone who has had anything to do with the professional training of teachers knows. Those who stand highest in the examinations not infrequently make poor teachers, and the opposite is very often true. At best a written examination can test only memory of principles and certain academic knowledge, and is in no way a test of possible teaching skill or adaptability to the work of a teacher. A high degree of native retentiveness for facts rather than the ability to teach is what a written examination really searches out, and it not infrequently happens that a well-trained teacher fails to pass a required examination, or that some immature and unfit person makes a high average. Only a few years ago an associate superintendent of New York City, who had been appointed because of peculiar ability and fitness for the position, failed to pass the examination required before taking up the work, while the educational press last year announced that a boy of eleven years of age had passed the county teachers' examination in one of the Pennsylvania counties with an average of 98 per cent. Similar cases are familiar to most school officers.

Just as fast as can be done, the written examination, as the means of entering the work of teaching, ought to be decreased in importance, and eventually it ought to be either reduced to a purely professional test or be entirely eliminated. When that time comes, and not until then, can we be said to have a well-educated and a professionally trained teaching force. Excepting a few favored localities, we cannot be said to have either today. Our teachers work largely on enthusiasm and devotion, and these help them over many a difficulty, but altogether too frequently their work is lacking in insight and in fundamental grasp of the problems involved. Alto-

gether too often it is the work of the amateur rather than the work of the master. One of the best evidences of this lack of professional education is the way our teachers' institutes are conducted. In a general way, the rank and file of our teachers can be counted on to swallow almost anything that is given them. Almost any kind of a fakir can command their attention.

One of the first moves in the direction of developing an educated and a trained teaching force for a state is to reduce the number of examinations given each year, and, while keeping the method open as a necessity, to place the main emphasis on the securing of trained teachers possessing credentials which in themselves are valid for certificates, and also on the payment of such salaries as will attract trained teachers to the teaching profession of the state. The subjecting of professionally trained teachers to technical tests and the toleration of low wage standards are both wrong, and the teaching profession should place itself strongly in opposition to both of these things. One of the first, one of the most important, and one of the most fundamental of all problems in the majority of our states is that of increasing educational standards and salaries. Four examinations a year are certainly enough for any state, and two would be a much better number. If this will not certificate enough teachers to fill the schools of the state, then the problem is an economic and not an educational one, and the taxpayers and not the teachers ought to be made to face and solve it. The task of the teachers of a state is to press for standards that are right and proper, and then look to the taxpayers to provide the necessary funds to pay for the kind of teachers demanded. So long as the teachers of a state tolerate frequent and low standard examinations, they cannot expect salaries to rise.

III. SPECIAL EXAMINATIONS AND TEMPORARY CERTIFICATES

Closely connected with the question of the number of examinations and the certification of enough teachers to fill the schools of the state is the question of special examinations and the granting of temporary credentials. There is some variance in the practice of the different states in this matter, but more than half of the states make some provision for such special examinations. In Arkansas, for example, where four regular examinations are held each year,

the county examiner is empowered to grant private examinations "on the written request of the directors of the district in which the teacher proposes to teach,"¹¹ when public necessity seems to demand it; in Iowa, with a regular examination at the county seat every month in the year, "special examinations may be held elsewhere at the discretion of the county superintendent;"¹² in Indiana, with eight regular examinations a year, a special examination "may be held at any time upon the written request of school boards;"¹³ in Nebraska, with twelve regular examinations each year, the county superintendent may grant temporary certificates to teach, until after the results of the next regular examination are known, to any person "who can show satisfactory reasons for failing to attend such examinations and satisfactory evidence of qualifications;"¹⁴ and in Montana the county superintendent "may grant a temporary certificate to teach until the next regular examination, to any person applying at any other time . . . who can furnish satisfactory reasons for failing to attend such examination," or who holds a certificate "of like grade granted in another county," or "upon certificates or diplomas showing fitness for the profession of teaching."¹⁵

On the other hand, Kentucky provides that four regular examinations shall be held in May, June, July, and August, of each year, and "no examinations shall be held at any other time whatever;"¹⁶ and in California there are no special examinations whatever, and county superintendents cannot grant temporary permits to teach unless the applicant is in possession of credentials or diplomas which will entitle him to receive a regular certificate, without examination, at the next regular meeting of the county board of education.¹⁷

What we have just said above with reference to minimizing the importance of, and gradually eliminating, the regular examination as a means of entering the teaching profession applies with still

¹¹ *Arkansas Statutes*, sec. 7568.

¹² *Iowa Code*, sec. 2735.

¹³ *Indiana School Law*, 1905 edition, sec. 81, p. 75.

¹⁴ *Nebraska School Law*, subdiv. 9 a, sec. 11.

¹⁵ *General School Law of Montana*, Art. XIII, sec. 1911; Art. II, sec. 1739.

¹⁶ *Common School Laws of Kentucky*, 1904 edition, sec. 63.

¹⁷ *California Political Code*, sec. 1543, div. 7.

greater force to the granting of special examinations and the issuance of temporary certificates. While fairly satisfactory reasons can always be advanced for special examinations in individual cases, by far the best way is to cut them out altogether, and to grant temporary certificates only to those whose credentials and evidence of professional fitness would entitle them, under a liberal plan for inter-county and interstate recognition of certificates, to regular certificates, at the proper time, without examination. Certainly in a state providing six to twelve regular examinations a year there is little reason for holding additional special examinations, and doubtless they could be dispensed with entirely without any bad effects on the schools. Perhaps the chief effect would be to force trustees to pay a little more, and to come to a decision as to teachers a little earlier in the year; and this would be a gain rather than a loss. The teacher from abroad, possessed of proper credentials, would in no way be affected by such action.

IV. FEES

The state must, as we have frequently said, require those who expect to teach its children to pass an efficiency test; and from time to time, as conditions warrant, the state should increase the requirements demanded for entering the work. The test is necessary, and all prospective teachers must be required to take it, in one form or other. This test is erected by the state for its own protection, but in more than four-fifths of the states the teacher, and not the state, pays the expense of this test in the form of an examination or certification fee.

This is nothing more than a form of petty graft imposed on the most poorly paid of all public servants, and against which the teacher has no recourse. This fee is quite generally imposed, not only for the examination, but also for a renewal or for the indorsement of a certificate in another county or state,¹⁸ and varies in amount from one to three dollars for county certificates, and from one to ten dollars for state certificates. Each trial a teacher makes at the examination means another dollar to the fund, and this system of

¹⁸ Quite a common provision is that a certificate from elsewhere will not be accepted or indorsed "until the applicant has paid the regular examination fee" into the local treasury.

fees, besides being wrong in principle, has a distinct tendency toward building up a formidable examination machinery, which in turn stands in the way of the recognition of diplomas and certificates from elsewhere and blocks the way for other progressive reforms. A careful reading of the Alabama law would lead one to conclude that this has been the effect there.

The examination is a state necessity for the protection of the children of the state, and the state should assume the expense of it and not ask the teachers to pay for it, even if the money is turned over to the "institute fund." Our national government has found it necessary to erect a civil-service test for its future employees in most branches of the public service, but the national government pays the expenses of the civil-service commission and provides the examinations free to all who wish to try them. Maryland and Delaware, two small and comparatively poor states, form commendable examples in this respect. The Maryland law provides:

The county superintendent shall hold regular examinations of teachers at such times as the board may direct. . . . No superintendent shall be allowed to charge any fees for the issuing of certificates to teachers; and if any superintendent shall be found guilty of charging or receiving any fee or reward directly or indirectly for issuing any certificate to a teacher, he shall be dismissed from office.¹⁹

The Delaware law similarly provides that "examinations shall be free to all."²⁰

V. RENEWALS

In about three-fourths of the states some provision is made whereby a certificate, at least one of the highest grade, may be renewed without the teacher being under the necessity of taking a new examination. On the other hand, in about one-fourth of the states there is no provision whatever for the renewal of any certificate, and the teacher must pass a new examination whenever his or her certificate expires. Indiana,²¹ Michigan, Iowa, Delaware, Ala-

¹⁹ *School Law of Maryland*, chap. xi, sec. 65.

²⁰ *Delaware School Law*, as approved May 12, 1898, sec. 23.

²¹ Indiana might be claimed as an exception, because if one holds two three-year certificates in succession the second is made permanent for the county at the end of the sixth year, so long as the holder continues to teach. The second three-year certificate must, however, be obtained by an examination.

bama, and Oklahoma are examples of states where there is no renewal of any certificate. Idaho²² is an example of a state where the first-grade certificate only is renewable; and Montana,²³ Nebraska,²⁴ and Minnesota²⁵ are examples of states where the first and second grades are renewable. In California²⁶ and Nevada²⁷ all certificates are renewable, though in these states all the lower grades of certificates have been eliminated. In Illinois²⁸ all renewals are at the option of the county superintendent. In Missouri²⁹ a third-grade certificate may be renewed once, a second-grade certificate twice, and a first-grade certificate any number of times. The Arkansas³⁰ provision for renewal by institute attendance has been cited previously, and a somewhat similar provision is to be found in the Texas³¹ law.

In a few states provision is also made whereby a county certificate becomes permanent for the county where issued after a teacher has taught a certain number of years. In Indiana the law³² provides that

any person who has previously taught for six consecutive years in said common schools, and shall hereafter obtain a three years' license (first-grade) to teach therein, so long as he teaches the above named subjects shall be forever after exempt from examination; but if such person shall, at any time after said examination occurs, suffer a period of one year to pass without having taught one full school year in the common schools of the state, except in

²² "The county superintendent may renew first-grade certificates at their expiration so long as the teacher is actually engaged in teaching."—*Idaho Political Code*, chap. 36, sec. 1028.

²³ *General School Law of Montana*, Art. XIII, sec. 1911.

²⁴ *Nebraska School Laws*, subdiv. 9 a, sec. 12.

²⁵ *Minnesota School Laws*, Title XXII, sec. 266; *Session Laws of 1899*, chap. 101, sec. 4.

²⁶ *California Political Code*, sec. 1775, div. 3.

²⁷ *Nevada School Laws*, 1905 edition, p. 27, sec. 7.

²⁸ *Illinois School Law*, Art. VII, sec. 3.

²⁹ *Missouri Revised Statutes of 1899*, sec. 9959, as amended by *Session Laws of 1903*.

³⁰ See footnote 25, Chapter II.

³¹ The holder must attend at least two-thirds of each county teachers' institute, and also a summer normal institute each alternate summer to be exempt from re-examination.—*Texas School Law*, 1905 edition, p. 31, sec. 92.

³² *Indiana Session Laws of 1903*, p. 291, sec. 2.

case of physical disability, properly certified by a reputable physician, then such exemption shall cease.

In California, to cite another example, the law provides:

When the holder of any certificate or state diploma shall have taught successfully in the same county, or city and county, for five years, the board of education of such county, or city and county, may grant a permanent certificate of the kind and grade of the class in which said applicant has been teaching, valid in the county, or city and county, in which issued, during the life of the holder, or until revoked *and provided*, that a certificate when renewed a second time, or any time thereafter, shall become by such renewal a permanent certificate.²²

In a majority of states there seems to be an evident intention to free the successful teacher from the necessity of frequent re-examination. This is certainly a desirable tendency, especially as it relates to the renewal of those higher grades of certificates which are based on further evidence of good education and professional success. It is well to refuse to renew the third-grade certificate, based on an examination on the "common-school branches" only, good for but one year, and strictly limited to the county where granted. It would be well indeed if all such low-grade certificates were not renewable at all, even by a new examination, and not only in the county where first issued, but anywhere in the state as well. The second-grade certificate may perhaps be renewable without examination, depending somewhat upon local requirements and circumstances, though it would be best in most cases to limit very closely the number of such renewals. The first-grade certificate though, if it has been granted on the basis of any advanced educational standards, ought to be renewable without examination on the submission of evidence of professional success and growth, and successful teachers holding the highest certificates ought not to be required to present themselves for re-examination, so long as they continue to teach successfully.

It is in our inability to determine at all accurately those important elements which we call professional success and professional growth, however, that the weakness of our present system of county supervision is at once evident. In most of the states our county supervision is clerical rather than supervisory in any broad educa-

²² *California Political Code*, sec. 1775, div. 4.

tional sense, and in few counties in any state is there any adequate professional supervision. The usual annual or semiannual visit of the county superintendent to the schools is of course worth something, and is often worth much; but it is of little value compared with what we need and might have if county supervision were opened up as a career for which a man might be warranted in making special preparation, and which he might hope to enter wholly on a basis of merit. Once do away with nomination and election by political parties, with the accompanying local residence, political availability, and, too often, past or expected future party service, and institute in its place an adequate system of professional supervision for our county schools, as we have done in large part for our city schools and high schools, with an equal freedom in the selection of superintendents and deputies, and then associate the certificating and supervisory functions, and the way is at once open for a marked improvement in the certification of teachers and the renewal of certificates by taking into consideration the professional growth and success of the applicant as well as the percentages made in a set examination.

Indiana is one of the very few states which have made any effort at all in this direction, and the system as worked out there, though the supervisory oversight is largely lacking, is perhaps the best plan we have as yet evolved. In granting certificates, county superintendents are authorized to "take into consideration fitness to perform the services required,"³⁴ and for those who have had teaching experience shall include, as part of the examination, the teacher's "success grades" as determined by the superintendent under whom the teacher has last taught. The law and accompanying regulations³⁵ make detailed provisions for the determination and acceptance of such grades.

Such a test, while decidedly inferior to that used by a superintendent or a supervisory principal in a city, is nevertheless an important element to include in certificating teachers in counties where the supervisory visits are of necessity short and infrequent, and the personal supervision inadequate.

³⁴ *School Law of Indiana*, 1903 edition, p. 75, sec. 81. The success items and their relative values are given there in full.

³⁵ *Indiana: Session Laws of 1903*, p. 291; act approved March 9, 1903; *School Laws of Indiana*, 1903 edition, secs. 89, 90 91.

CHAPTER V

STATE SYSTEMS OF CERTIFICATION

In addition to the local or county systems of certification, almost all the states have instituted some form of state certification as well. In a few states the state examination system has completely supplanted the local systems, and all teachers in the state are required to pass the state examinations and to hold certificates issued by the state. In a few others all questions are prepared and all examination papers are graded by the state, but the certificates to teach are issued by the county superintendents, and are limited in validity to the county where the examination was taken and the certificate issued. In such states the evolution of a centralized state system of certification is in process of accomplishment, but is as yet incomplete. In most of the states, however, the state system has either been superimposed from above to correct abuses in the local systems and to provide for a broader system of certification than that then in force, or it has been established to provide for higher and professional state certificates as distinguished from the county or local certificates, and without superseding the latter. In a few states the state examination system exists in somewhat co-ordinate relations with the local certifying system.

I. STATE SYSTEMS SUPERSEDING LOCAL SYSTEMS

Arizona and Alabama are good examples of the first type—that of a state system which has completely superseded and supplanted the local systems.

In Arizona¹ all examination questions are prepared by the Territorial Board of Examiners and forwarded to the county superintendents for use in the quarterly examinations. This official conducts the examinations and forwards the papers, unmarked, to the board for marking. Those who pass are granted territorial certificates of either first or second grade, valid anywhere in the territory.

¹ *Arizona Statutes*, Title 19, chap. 2, sec. 9, and chap. 12, secs. 106, 107.

Alabama, by a recent law,² has established a most elaborate and detailed state examination system. A state board of examiners has been constituted which prepares all questions for the examination of teachers throughout the state. Two regular examinations are to be held each year, and on the same days throughout the state. Special examinations may be given in Montgomery and at the normal schools only. All teachers, not teaching in cities of two thousand or more inhabitants, are required to take this examination, even graduates of the Alabama normal schools not being exempt. A fee of from one to three dollars must be paid by every applicant, varying with the grade of certificate desired. The members of the state board of examiners are each to be paid "five dollars per day, including Sundays, for the time they are engaged in conducting the examinations." Certificates are issued by the secretary of the state board of examiners to those who pass, and these certificates "entitle the holder to teach in the public schools of any county in this state for the following periods of time: a third-grade certificate, two years; a second-grade certificate, four years; and a first-grade certificate, six years."³ No teacher shall be granted a second-grade certificate more than twice,⁴ and when a teacher has taught ten years on a first-grade certificate, it may become a life certificate."⁵

These two states are examples of a thoroughly developed state examination system. The state here controls all certification entirely and grants certificates good in any school in the state. Similar conditions exist in West Virginia, the certificates granted on the state examination being valid anywhere in the state.

There is much to be said for such a uniform state certifying system, though there is a strong tendency in all such systems to go to an extreme, and in the Alabama plan extremes are very evident. No recognition, for example, is given to normal training, to diplomas of any kind, or to certificates obtained in any other state. The only concession is that made to teachers in cities of two thousand inhabitants or over, which have the right by charter to examine their own teachers. In West Virginia similar extremes are evident, the law providing that "no college diploma or certificate of recommenda-

² "An Act to establish a uniform system for the examination and licensing of teachers for public schools;" approved February 10, 1899.

³ *Ibid.*, sec. 15.

⁴ *Ibid.*, sec. 16.

⁵ *Ibid.*, sec. 17.

tion from the president or faculty of any college, or normal school, or academy, shall be taken to supersede the necessity of examination by the board of examiners." ⁶

In view of the general unreliability of a mere examination as a test of proficiency for teaching, and the great desirability of establishing some standards of general education for prospective teachers, the undesirability of such limitations and restrictions as those imposed in Alabama and West Virginia is very evident. The general validity of certificates throughout the state, however, is a meritorious feature of the plan.

South Dakota is an example of a centralized state system in process of evolution, though the evolution is not as yet complete. The law makes it the duty of the state superintendent of public instruction "to prepare all questions for the examination of teachers by the county superintendents, and no county superintendent shall examine teachers with questions not so furnished." ⁷ The questions are to be sent to the county superintendents, who shall give two examinations each year, "at times uniform throughout the state," ⁸ and shall forward the answer-papers, unmarked, to the state superintendent of public instruction. After grading the same, he "shall send to each county superintendent in the state a list of persons receiving first- and second-grade certificates." ⁹ First-grade certificates are valid for three years in any county in the state, and second-grade certificates are valid for two years in the county in which the examinations were held. ⁹ The state also grants, on examination, a state certificate good for five years, valid in any county, city, or town in the state. ¹⁰

Nebraska and North Dakota have systems practically similar to that of South Dakota, except that the county certificates of all classes are limited in validity to the county where issued, which is a step farther removed than South Dakota from the centralized state system. That these states represent very imperfectly evolved state certificating systems is shown by the very anomolous condition whereby the questions used are prepared by the state and are uniform throughout the state, and the markings of the papers

⁶ *School Law of West Virginia*, 1903 edition, sec. 29, div. 2.

⁷ South Dakota: *Revised Code of 1903*, sec. 2278.

⁸ *Ibid.*, sec. 2295.

⁹ *Ibid.*, sec. 2294.

¹⁰ *Ibid.*, sec. 2286.

are also made by the state authorities, but the certificates are issued by the county superintendents on instructions from the state superintendent, and are limited in validity to the county where the examination happened to be taken—a purely adventitious circumstance which has nothing whatever to do with the nature of the test, and which presumably has nothing to do with the marking of the results.

The only difference between the examination system in these two states and the county examination system as found in such states as Illinois and Kentucky is that the state here prepares the questions and marks all the papers, while in Illinois and Kentucky the questions are prepared and the markings are made by the local authorities.

Indiana and Texas are even farther removed, being representatives of a state certificating system in the very beginnings of its evolution. In Indiana the use of uniform examination questions furnished by the state board of education, which was for a long time optional with county authorities, has recently been made obligatory, and a recent act of the legislature¹¹ has further extended the state system by giving to all applicants for a teacher's certificate "the right to elect to have their manuscripts sent to the state superintendent of public instruction for examination instead of being graded by the county superintendent." If the state superintendent approves of the papers submitted, he issues to the candidate a license which is not limited to any particular county, but which must be taken as qualifying the person to whom granted, so long as in force, to teach anywhere within the state, if of the proper grade for the school for which he may be employed. The examination subjects are the common-school subjects, and, if the applicant passes, he may receive a twelve, twenty-four, or thirty-six months' license valid throughout the state. By passing an examination in certain additional subjects he may receive a sixty-months' high-school license, valid in any non-commissioned high school in the state.

The Texas law¹² is almost identical. Any applicant for the three upper grades of county certificates may request that his papers be sent to the state board of examiners for examination, and they,

¹¹ *Acts of 1899*, p. 488; approved March 6, 1899.

¹² Texas: *Acts of the Twenty-ninth Legislature*, chap. 124, secs. 111-13.

"if they believe that the papers are fairly and accurately graded," shall so report to the state superintendent of public instruction, and he shall take up the county certificate previously issued on the examination and "issue in lieu thereof another certificate of equal rank, valid in all the counties of the state."¹² In both of these states this state general certificate plan exists in co-ordinate relations with the local county examination systems.

Connecticut is a good example of a state system which has been superimposed from above to correct abuses in the local certifying systems and to provide for a broader system of certification than that provided by the local town committee systems. Table II on page 15 shows the development of this system, and indicates how generally acceptable it has been to the teachers of the state.

II. STATE SYSTEMS FOR HIGHER CERTIFICATION

About three-fourths of the states of the Union provide some form of a state system of examination and certification, organized for the purpose of granting professional and life-certificates to experienced and successful teachers. The local certifying system here continues its local work, the state system confining its work to the granting of higher certificates to those who have served a preliminary apprenticeship under the local system.¹⁴

The theory underlying such a higher certifying system is that of rewarding successful teaching experience and professional effort by a certificate of a distinctly professional character. The Oregon law, for example, provides ¹⁵ that such certificates shall be granted only to those found "to possess a good moral character, thorough scholarship, and successful experience in teaching." In Minnesota the law ¹⁶ provides that "permanent teachers of high character and broad scholarship, and who have had a successful experience, may, upon examination," be granted professional state certificates.

In nearly all of the states where such certificates are granted they are regarded as of a higher order than the ordinary county

¹² *Ibid.*, sec. 113.

¹³ In eleven states one finds no mention of life-diplomas in the statutes.

¹⁴ *Oregon Code*, sec. 3348.

¹⁵ *Minnesota Statutes*, sec. 3749, as amended by the laws of 1901, chap. 367, sec. 1.

certificate. In many states practical experience in teaching is a prerequisite to the granting of state certificates or diplomas, the amount of such experience required varying greatly in the different states, from a maximum of ten years in Alabama to a minimum of eight months in Maine. It also varies with the class of certificates desired, usually being more for a life-diploma than for a limited state certificate. All the states require that at least part of the experience shall have been attained within the state, and a few go to the extreme of requiring that it all shall have been so attained. In a few states such certificates are granted on the basis of mere service alone and require no additional evidence of academic or professional growth. Sixty or seventy months of teaching is the only prerequisite to receiving a higher state certificate is a very unsatisfactory requirement, as the teaching experience, under our very inadequate system of rural and town supervision, may have been good, bad, or indifferent, and may represent little or no real professional growth. This is especially the case where the entire teaching experience has been secured in somewhat isolated positions, or on certificates involving a knowledge of only the common-school branches. Under such a system life-diplomas come to be held by all who have taught the requisite number of months, and they cease to be a distinctive honor to the holder. They are granted to all who keep alive and hold on to a teaching job, and are naturally regarded with suspicion by superintendents. In the states where these conditions prevail a radical reform is needed.

In most of our states two grades of state certificates are granted. A few states grant more than two grades, and the nomenclature is not the same in all. Disregarding minor differences and variations, we may classify the two grades of state certificates as Professional Certificates and as Life-Diplomas. The latter should be the culmination of a teacher's certifying career. To obtain either of these certificates most of the states require an examination in professional knowledge and in advanced academic studies, in addition to evidence of successful teaching experience. Some such requirements ought to prevail in all states granting such higher professional certificates.

The educational requirements vary greatly in the different states. In some it is possible to obtain the highest state certificate with

only a common-school education, and in others enough additional subjects are required in passing from the lowest to the highest to require a full high-school education or its equivalent from the applicant. The following tables show, for forty states, the number and the branches required in each for a state certificate or diploma of the highest grade. In most states this is the State Life-Diploma, though in eleven states the statutes make no mention of such a document. As in the tables in the previous chapter, where the possession of a certificate of lower grade is accepted for the subjects covered or is a prerequisite for obtaining such a state certificate, the subjects required for such a certificate have been included. The tables, therefore, represent the total number of subjects in which the applicant must be examined, during his professional career, in order to obtain the highest certificate issued by the state. Such a method of comparison is necessary in order to make any accurate comparison of the educational requirements in the various states, and to arrive at any idea as to the scholastic attainments which constitute the educational ideals, as expressed in legislation, of the different states. The difficulty of absolutely determining the number of subjects in which applicants are required to be examined in some of the states, on account of options allowed both to the applicant and the board of examiners, has caused the omission of certain states from the tables. Forty states and territories have been tabulated.

TABLE IV

NUMBER OF SUBJECTS REQUIRED FOR THE HIGHEST CERTIFICATE IN FORTY STATES

| 8 subjects | 1 state | 22 subjects | 4 state |
|------------|---------|-------------|---------|
| 11 " | 1 " | 23 " | 1 " |
| 12 " | 3 " | 24 " | 2 " |
| 13 " | 3 " | 25 " | 2 " |
| 15 " | 3 " | 26 " | 3 " |
| 16 " | 4 " | 28 " | 1 " |
| 17 " | 1 " | 29 " | 1 " |
| 18 " | 1 " | 30 " | 1 " |
| 19 " | 2 " | 32 " | 2 " |
| 20 " | 2 " | 34 " | 1 " |
| 21 " | 1 " | | |

Mean number of subjects required, 19.

Tabulating the subjects required in the different states, we get the next table, which shows the relative frequency of the different subjects in the requirements for state certificates in the different states:

TABLE V
EXAMINATION REQUIREMENTS FOR THE HIGHEST STATE TEACHER'S CERTIFICATE
BY GROUPS OF SUBJECTS

| | |
|---|----|
| Number of states tabulated | 40 |
| Number of states specifically requiring | |
| 1. The common-school staples: | |
| Reading | 40 |
| Arithmetic | 40 |
| Physiology and hygiene | 40 |
| Grammar | 40 |
| Geography | 39 |
| Orthography | 38 |
| United States history | 38 |
| Civics | 38 |
| Writing | 34 |
| 2. Supplemental common-school subjects: | |
| Composition | 17 |
| Bookkeeping | 14 |
| Drawing | 10 |
| State history | 7 |
| Agriculture | 5 |
| Mental arithmetic | 4 |
| Music | 4 |
| Nature-study | 1 |
| Current events | 1 |
| Manual training | 1 |
| Higher arithmetic | 1 |
| 3. High-school subjects: | |
| Algebra | 33 |
| Geometry | 31 |
| Physics | 28 |
| Literature | 25 |
| General history | 24 |
| Botany | 22 |
| Rhetoric | 20 |
| Physical geography | 16 |
| Zoölogy | 13 |
| Geology | 11 |
| Chemistry | 10 |
| Latin | 8 |
| Trigonometry | 7 |
| Astronomy | 5 |
| English history | 1 |
| German | 1 |

TABLE V—*Continued*

| | | |
|--|----|--|
| 4. Pedagogical subjects: | | |
| Theory and art of teaching | 27 | |
| Psychology | 20 | |
| School law | 17 | |
| History of education | 17 | |
| Pedagogy | 13 | |
| Methods | 9 | |
| School management | 9 | |
| Philosophy of education | 5 | |
| Science of education | 2 | |
| Child-study | 1 | |
| School systems of Europe and America | 1 | |
| Miscellaneous: | | |
| Thesis | 7 | |
| Intellectual philosophy | 2 | |
| Elocution | 2 | |
| Logic | 1 | |
| Moral philosophy | 1 | |

A glance at the above table shows at once what is common in requirements and what is exceptional. The subjects of group 1 are naturally common to all, as they are required of the applicant when he passes his first examination and obtains his first teaching certificate. Composition and bookkeeping are the common subjects of group 2, though required in less than half the states. Drawing and music, two far more fundamental subjects, are required in but 25 per cent. and 10 per cent. of the states respectively. Of the high-school subjects of group 3, there is a somewhat common agreement on algebra, geometry, physics, literature, and general history, from 60 to 80 per cent. of the states requiring these subjects. A certain emphasis is also placed on the other sciences, particularly the biological sciences, but the languages are in little favor. In the pedagogical group there seems to be a somewhat general agreement on the requirement of some knowledge of pedagogy, or the theory and art of teaching, but, aside from this single educational topic, but little is required. Educational psychology is required in but half of the states, and a knowledge of the school law of the state, or of the history of education either in general or in the state, is required in but 42 per cent. of the states. But one state in the entire forty, Indiana, requires any comparative knowledge of schools

of any other country than our own, and probably this is equally true if applied to the school systems of any other state than the one in which the candidate teaches. One subject in the miscellaneous group, that of thesis, required in seven states, is one of much more importance than is given it, and one capable of much usefulness in testing a candidate for a higher state certificate. In Germany it is used extensively in the examination of teachers, and with very good results. The ability to hunt up and organize information on an educational question ought to be expected of anyone worthy of the higher state certificates.

Examined critically, these requirements for the highest state certificates are low, even under the best conditions, and the standards in many of the states are very low indeed. A state professional certificate or life-diploma ought to represent, not only a high degree of professional study and success, but also some substantial evidence of broad general education and thinking power. It ought never to be given on the basis of a certain number of years of teaching and a recommendation by some local authority. While most of the states require an examination in additional subjects, in but a very few states is there any specific requirement made as to the nature or amount of the education prerequisite for admission to the examination for these highest certificates, the examinations being thrown open to anyone who can pass them.

In general, just as was the case with local county certification, there is no distinction in state certificates between certificates for the elementary school and those for high-school work, a state certificate generally being good in any kind of school. Less than one-fifth of the states make any distinction whatever between these certificates.

All plans for higher state certification should have one main purpose—that of granting certificates of general validity to those teachers whose general education, professional success, and high personal character stamp them as especially well educated and successful members of the teaching profession. To do this is particularly desirable. Those who have proved their capacity as teachers, and who can offer proof as to character, scholarship, and pedagogic insight, ought to be singled out and given professional or life-certificates, valid anywhere in the state for the kind of work their holders

are prepared to do. So long as these persons continue to teach, there ought to be no question as to certificates, and large freedom of movement ought to be allowed to them. In states where the higher professional and life-diplomas are led up to by a graded system of certificates, each presupposing added knowledge and professional growth, and where the granting of them involves a searching professional examination rather than an academic one, there is little to lose and much to gain from the issuance and general recognition of such certificates and diplomas. In so far as these certificates and diplomas are based on high requirements, they should be recognized between states, so that the successful and thoroughly professional teacher may have as large freedom of movement as possible.

On the other hand, if these higher certificates and life-diplomas are granted on the basis of mere teaching service, and perhaps a more or less formal recommendation, they may not, and probably will not, designate the professionally competent, and any general recognition of such certificates is very inadvisable. There are states in which the possession of a life-diploma is a distinct honor and marks the holder as one of the most capable and progressive teachers in the locality; and there are other states where its possession is no honor at all, and where discriminating boards of education look upon an applicant with certain amount of merited suspicion when he heralds the fact that he holds a life-diploma. It may merely signify that he has taught in some unprogressive and indiscriminating locality the requisite number of months.

A life-diploma, too, ought not to be valid for life, if the applicant leaves the teaching profession. A life-diploma ought to be intended for the professional teacher, the man or woman who has made education a profession and a life-career, and it should not be possible for the non-professional teacher to obtain it and then lay it away as a rainy-day safe-guard. Some of the most troublesome applicants with which boards of education or superintendents have to deal are the holders of life-diplomas who have been out of teaching for years, but who, in the press of hard times, want a position in the schools and use their influence to secure it. As a means of eliminating this class of non-professional teachers, a few states have inserted in their laws what seems to the writer to be a very wise

provision;¹⁷ viz, that the life-diploma shall lapse if the applicant fails at any time to teach or engage in some form of educational work, without a valid excuse, for a certain number of years.

¹⁷ "A state diploma shall be good in all schools throughout the state, until revoked by the superintendent of public instruction, or until the holder shall fail for two successive years to be engaged in active school work."—Kentucky: *Acts of 1894; School Law*, sec. 132.

"Provided, that any teacher holding a life-certificate shall forfeit the same by leaving off the business of teaching for five consecutive years."—Alabama: "An Act to establish a uniform system for the examination and licensing of teachers of the public schools;" approved February 10, 1899; sec. 17.

"No professional diploma or certificate shall be in force if the holder allow a space of five years to elapse without following some educational pursuit."—*Utah Revised Statutes*, sec. 1767, div 4.

"No life-certificate shall be in force after its holder shall permit a space of three years to lapse without following some educational pursuit, unless said certificate shall be indorsed by the state superintendent."—Minnesota: *Acts of 1901*, chap. 367, sec. 1.

The Nebraska law contains a provision almost identical with that of Minnesota.—*School Laws of Nebraska*, as amended to 1905, subdiv. 9 a, sec. 3, div. 1.

"If the holder of a professional (life-) certificate shall at any time cease to teach or be engaged in other educational work for a period of five years, such certificate shall lapse, and the lapse, with date and cause, shall be made a matter of record in the office of the state superintendent of public instruction. Such certificate, however, may be reinstated under such rules as may be prescribed by the superintendent of public instruction."—North Dakota: *Revised Political Code of 1899*, chap. 9, Art. IX, sec. 737, as amended by subsequent acts.

CHAPTER VI

SPECIAL FORMS OF CERTIFICATES

So far in the consideration of the question of certification we have dealt with teachers' certificates, merely as such, and without distinction except as to grades. This has been done for the reason that in almost all of our states a certificate of any of the regular grades is valid for teaching anywhere in the school system. In this chapter we wish to consider certain special forms of certificates, granted by a few states, to teach in certain types of schools or for instruction in certain special forms of school work, viz., high-school certificates, kindergarten certificates, and special certificates.

I. HIGH-SCHOOL CERTIFICATES

In almost all of our states a teacher's certificate of any grade is good to teach in any part of the school system in which the teacher may be able to secure employment. Cases not infrequently happen of a teacher teaching in a high school when the teacher herself has not had more than a year or two of high-school work. The writer has personally come in contact with three such cases. To be employed as a teacher in a high school when one has never had more education than that represented by a four-year high-school course is also not uncommon. With the great increase in the number who go to college, and the general community insistence on having a corps of trained teachers for a high school, the number of such poorly educated secondary-school teachers is naturally growing less each year. In almost all of our states, however, the change is taking place in response to community sentiment rather than in response to educational legislation, and the attitude of almost all of our states, as expressed in legislation, is far from being in accord with the best thought of the times.

It may be laid down as a safe standard that a teacher is not prepared to teach in a high school until after he has had some advanced training beyond that given in the high schools or normal schools of the state. The high school is the place for bringing the student into contact with new methods of instruction and new ways of

thinking as well as new subject-matter. Much of the work of the high school, with our elective courses, many subjects of instruction, and advanced instruction along certain lines, is fully as advanced as that done in the first year of the college course. Unless the teacher has come in contact with men who are masters of such subjects, and has learned something of the master's method of dealing with the great truths that lie in his field, he is not likely to carry much of a message to the young people who come under his direction in the secondary school. Just as it is desirable that the teacher in the elementary school shall have had some high-school training to give her additional knowledge and breadth of view and culture, so that she may make her teaching broader than the mere course of study or the textbooks she uses, so it is equally desirable that the high-school teacher should be expected to know more than what is taught in the high school, to have come in contact with men of broader and more extensive learning, and to have caught something of that method—which, after all, is nothing more than organized common-sense—which men of larger scholarship apply to the solution of difficult problems. This practically demands that the teachers of our high schools be required to be college graduates, or to have had an equivalent education. This fundamental requirement was clearly set forth by the Committee on College Entrance Requirements¹ in its report made to the National Educational Association, in 1899, and is certain ultimately to find general acceptance.

Such a requirement obviously cannot be enforced by means of a written examination. To examine the candidate on the subjects studied in the university would be not only almost impossible, but ridiculous as well. To attempt to enforce it by an examination given on the subjects to be taught in the high school will also fail, for the reason that the high-school graduate, fresh from his studies, can almost always pass the examinations more easily and with better grades than the college graduate.² The only safe way is to impose

¹ See *Proceedings of National Educational Association*, 1899, p. 658.

² This was clearly the experience of California. Under the old system of examinations for high-school certificates, the candidate fresh from the high school could do better than the college graduate. There was much variation in results according to the emphasis placed on the examinations by the county

a definite educational requirement, such as graduation from a college of recognized rank, as a prerequisite to the granting of such a certificate to teach. For the strictly pedagogical part of the preparation either certain work and courses in education should be required to be taken as part of the college course, or a special examination on educational topics alone ought to be provided.

A few of our states have passed through the earlier stages of a series of grades of general certificates, and have evolved a high-school certificate, based upon certain definite educational requirements. California is a good case in point. In the earlier period of its history this state issued three grades of teachers' certificates. Later a distinct high-school certificate was evolved, but it was granted only on the basis of a successful examination before a county board of education. Still later, in 1893, the law³ was so amended that a graduate of the University of California, or any other institution recognized as equivalent in rank, who had complied with certain subject-matter and professional requirements, might be given a recommendation by the faculty of such institution, and this recommendation must be recognized by all county boards as valid for a high-school certificate. This placed the educational requirement on a par with the examination, the two methods existing for a time side by side. In 1901 the county examinations for the high-school certificate were entirely abolished,⁴ and in 1905 the educational requirement was raised to a year of graduate study in addition to a full college course.⁵

In Indiana the state board of education has also provided within recent years for an examination for high-school certificates,⁶ and by a series of decisions it has compelled all teachers to stand an examination in the subjects which they expect to teach in the

boards of education, but in some counties almost all of the high-school teachers were non-university material. This fact, coupled with the confessed inability of many of the county boards properly to conduct such an examination, and the rapidly increasing number of university graduates, led to the abolition of the county examination entirely in 1901.

³ California: *Political Code*, sec. 1521, 2 a.

⁴ *Ibid.*, revision of sec. 1772, *Session Laws of 1901*.

⁵ *Bulletins* 86 and 99, California State Department of Education, 1906.

⁶ See details of examinations, *School Law of Indiana*, 1903 edition, pp. 39, 40.

schools.⁷ All, however, is based on a written examination without the requirement of any definite educational preparation.

These two states, given as examples, stand nearly alone in the matter of definite higher requirements for high-school teaching. California occupies the most advanced position in the matter of any state in the Union. In a number of other states the diplomas of local universities are recognized for certificates to teach, but such recognition does not involve any exclusive requirement of such diplomas for high-school instruction. In most of our states the only legal requirement for instruction in a high school is one of the regular grades of county certificates.

The idea underlying the California position, that of requiring a separate certificate for high-school work and of making a college education a prerequisite for it, is so thoroughly sound that the writer predicts that it will ultimately be accepted generally throughout the United States. In many of our states the enforcement of such a requirement would not be possible at present, but in almost every northern and western state a movement looking in that direction is possible now. The first step is the definite recognition of high-school work as a field demanding special and additional preparation, and the separation of high-school certificates from those of elementary schools, by the establishment of an educational requirement to supplement an examination. In view of the enrichment taking place in the seventh and eighth grades, and the probability of departmental work and a six-year high school coming to be recognized features of our educational system, very sharp lines of demarkation should not be drawn. The high-school certificate ought also to be valid to teach in at least the seventh and eighth years of graded city systems. The second step in the process is the recognition of college diplomas and other evidences of preparation as the full equivalent of the subject-matter examination; and the third and last step is the entire elimination of the subject-matter examination and the requirement of the college diploma in its stead.

II. KINDERGARTEN CERTIFICATES

What has been said with reference to high-school certificates applies with equal force to kindergarten certificates. The work

⁷ See decisions in *School Law of Indiana*, 1903 edition, decision 6, p. 77, and decisions 29 and 30, p. 80.

of the kindergarten is special and requires special training. A written examination cannot test the teaching ability of the prospective kindergarten teacher. The work, too, demands broad sympathies and culture, and these are generally a product of a somewhat generous education. A certificate of graduation from a reputable kindergarten training-school, or from the kindergarten department of a state normal school, where a good general education has been presupposed for admission, is about the only satisfactory test which can be imposed. The prerequisite general education ought not to be less than a high-school education. This standard has been reached by a number of cities, and by California ^a as a state.

III. SPECIAL CERTIFICATES

By these are meant special certificates to teach special subjects, such as music, drawing, physical training, etc., and not the temporary certificates mentioned in a previous chapter. The intent of all special certification should be to recognize extensive technical or special training, and along lines different from the ordinary lines of school work, and the practice should not extend to the granting of special certificates to those who ought to but cannot secure regular certificates. There are few lines of work in which a special certificate should be granted. Drawing, music, physical training, domestic science, special instruction of defectives (deaf and blind), manual training, and certain forms of commercial, industrial, and technical work will about cover the field.

The danger of all such special certificates is that the holders, having entered the profession by an easier method, will represent a lower standard of general intelligence and culture than the other teachers of the school, and that the work of the teacher will be cast

^a The law here provides that kindergarten-primary certificates may be granted "to the holders of diplomas of graduation from the kindergarten department of any state normal school of this state," or "to holders of credentials, showing that the applicant has had professional kindergarten training in an institution approved by the state board of education, and also general education equivalent to the requirements for graduation from the kindergarten department of a California state normal school." As all California state normal schools require a high-school education for admission and then offer a two-year course, the requirement of a high-school education and kindergarten training in an approved school in addition is a general state requirement.—California: *Political Code*, sec. 1775, subdiv. 1 c.

into more or less disrepute in consequence. This has certainly been the case altogether too often with the specially certificated teacher of penmanship in our elementary schools, the teacher of bookkeeping in our commercial courses, and the teacher of German, French, and Spanish in our high schools. By far the safest way, where the wage standard of a state will permit, is to insist upon a minimum of general education for all such special teachers, and to limit the granting of special certificates as closely as may be done. It must be recognized that drawing, music, and some forms of industrial and technical work require long and special training, and that an insistence on the regular academic standards would not be possible; but the teacher of the modern languages is essentially a teacher of culture and the history of culture, and an insistence upon the regular academic standards is in the line of better education. The provision of the California law with reference to special certificates seems to the writer to be especially meritorious.⁹

*"Special certificates may be granted to those who, by examination or any credentials, or by both, shall satisfy the board of their special fitness to teach one or more of the particular studies for which special certificates may be granted, and who shall satisfy the board of their proficiency in English grammar, orthography, defining, and methods of teaching. No special certificate shall be granted to teach, in any school, studies other than drawing, music, physical culture, and commercial, industrial, and technical work."

CHAPTER VII

SUPERVISORY CERTIFICATES

A tabulation of conditions in the various states shows that in fifteen of our states the certification of teachers is almost wholly in the hands of the county superintendent alone; in fifteen other states the certification of teachers is controlled by a county board of education or examiners, of which the county superintendent is a member in all but one state; and in the remaining states the certifying authority is the state, the town, or some combination of the state and the locality.

Of the fifteen states in which the county superintendent (or an equivalent official) has control of the certification of teachers, we find that in four¹ no educational or professional qualifications have been established for the office, while in the other eleven some requirements for the county superintendency are laid down in the laws of the state. In Arkansas² and Iowa³ the possession of a live first-grade certificate is made a prerequisite to taking the office. In Montana⁴ the county superintendent, in addition, must be a citizen and a resident of the state and county, and have had twelve months of experience as a teacher in the schools of the state. In Idaho⁵ a first-grade teacher's certificate with one year of teaching experience on it, and a total of not less than two years' experience in the state, are required. In North Carolina⁶ the county superintendent must be "a practical teacher, or who shall have had at least two years' experience in teaching school, and who also shall be a man of liberal education." In Pennsylvania⁷ the county

¹ Colorado, Illinois, Minnesota, and Wyoming.

² *Arkansas Statutes*, sec. 7562.

³ *Iowa Code*, sec. 2734, as amended by the *Session Laws of 1898*, chap. 85.

⁴ *Montana Statutes*, Title III, chap vi, Art. II. sec. 1744.

⁵ *Idaho Political Code*, chap. 36, sec. 1019, as amended by the *Session Laws of 1903*, p. 284.

⁶ *North Carolina Statutes*, revival of 1905, sec. 4135.

⁷ *Pennsylvania School Laws*, sec. cclxix.

superintendent must hold a diploma from a college or normal school, a professional (first-grade) certificate issued by some local authority, or a certificate of competency issued by the state superintendent; and he must also have had successful experience in teaching. In Georgia⁸ the county school commissioner must be examined by the president of the county board of education on questions furnished by the state school commissioners, before he can be elected. In Maryland⁹ the state board of education examines candidates for the office of county examiner, and gives certificates of qualification.

In Wisconsin alone, of the first group of fifteen states, is there anything like an adequate educational and professional requirement made for the office of examiner and superintendent. In this state a definite county superintendent's certificate is provided for,¹⁰ to be issued upon examination before the state board of examiners. The examination includes all the subjects for a first-grade certificate, and, in addition, "school law, and the organization, management, and supervision of district schools." The applicant also must be of good moral character, and have had not less than eight months' experience as a teacher in the public schools. The county superintendent is still nominated and elected along political lines, but must meet these requirements to qualify for the office.

Of the second group of fifteen states, where a county board of education or examiners examines the candidates for teachers' certificates, but few states distinctly and specifically require that the board, or any large proportion of it, shall possess any particular educational or professional qualifications. In California the county board of education, consisting of five members, one of whom is the county superintendent, must contain three persons holding grammar-grade (first-grade) teachers' certificates, and, if there is a high school in the county, one member must hold a high-school certificate.¹¹ Michigan also requires¹² that a member of the county board of examiners "shall hold, or shall have held, within three years next preceding his appointment, at least a second-grade cer-

⁸ *School Laws of Georgia*, 1903 edition, Part IV, sec. 22, p. 18.

⁹ *Maryland Code*, Art. LXXVII, chap. iii, sec. 14.

¹⁰ *Wisconsin School Law*, 1905 edition, sec. 461, 1, p. 99.

¹¹ California: *Political Code*, sec. 1768, subdivs. 2 and 3.

¹² *General School Laws of Michigan*, 1903 edition, secs. 177 and 179.

tificate," and also have had nine months' experience as a teacher. The county school commissioner in Michigan must be a graduate of a college or normal school, or hold a state certificate or a county first-grade certificate. A few other states require the county superintendents to hold certificates to teach, and in many states where such a requirement is not expressly stated in the law it is enforced by public opinion. In a general way it may be said that educational opinion has crystallized on the idea that the certification of teachers should be in the hands of professional teachers instead of laymen, and that a county superintendent, or other certifying authority, should be possessed of at least the highest grade of certificate which is issued by him.

This is all very good as far as it goes, but it is entirely inadequate to meet the needs of present-day education. Such a system brings to the front only the old and successful practitioner, while what we need is the man who, in addition to successful practice, has secured a broad education and made a careful study of school administration and educational theory as well. There is no particular fault to be found with the present body of county superintendents as such. They are good enough in their way, and are the best the present system can produce. The trouble, however, is with the system. It produces the successful practitioner who has learned largely by experience and imitation, and not the educational leader who works, partly in the light of his past experience, but largely in the light of the best educational theory there is on the subject. Too often our superintendents work without any guiding theory of consequence, with the result that their educational work is traditional work and highly conservative, and their main services clerical rather than supervisory, in any broad educational sense of the term. Such work and conditions will not meet the needs of the future in a nation where the changes in the conditions of living, and the consequent modifications of an educational system to meet changed conditions, are taking place as rapidly as they are with us at present. Everywhere our rural schools are calling for leadership and close educational supervision of a new order; but little can be done to answer this call until some important changes are made in our methods of selecting supervisory officers, and the number of these is largely increased. In the judgment of the writer, two funda-

mental changes ought to be made in our method of selecting men for supervisory positions. Both are of fundamental importance. The first is the erection of distinctly higher educational and professional standard for supervisors; and the second is the elimination of the county superintendency from politics, making it an appointive office, with the selection made wholly on the basis of educational ability.

Wisconsin is an example of the first, and as such it stands almost alone among the states. The Wisconsin plan is capable of general and further application. A distinct supervisory certificate ought to be erected by each of our states, and the premium placed upon thorough preparation for educational leadership. The educational leader is the modern social engineer, and he must possess a broader training and be able to see farther than those he proposes to lead and direct. Such a certificate could not at first be required of all. Such an attempt would result either in failure or in very low standards. The standard for such a certificate should be made high; the desirability of holding such a certificate should be emphasized; if possible, a monetary premium should be placed on the possession of the same, and, after the number of such certificates has multiplied sufficiently, then require that, after a certain time, all new supervisors or superintendents must hold such certificates.

It must be kept clearly in mind that the real value of such a certificate will lie in the high standards required to secure it, and that broad and liberal training should be demanded as a prerequisite for educational leadership. A high-school education, or good normal-school training, or the possession of a first-grade certificate based upon an examination on some high-school subjects, is certainly a minimum in general education. In addition, there should be evidence of high character, and of particularly successful experience as a teacher for a reasonable length of time. All this is in the line of prerequisites, and these are as low as can be made with any safety. The candidate possessing these prerequisites should now be subjected to a purely professional examination in educational psychology, the theory of education, school administration, the school law of the state, and school hygiene; and the history of the educational system of the state could also be added with advantage. A still further test of the candidate's capacity could be made by

requiring him to prepare a thesis on some practical educational topic, as is done in Germany, giving him sufficient time and the use of a library. If the educational leader is to solve problems, he must know how to consult authorities, and select and organize the information he needs for his topic. The thesis is a splendid test of this particular kind of ability.

Keeping in mind the desirability of broad education for leadership, the above might well represent the requirements for a second-grade supervisory certificate. A first-grade certificate should be based on the possession of a college or university education, and similar evidence as to character and successful experience as a teacher. In place of the examination in educational subjects, a recommendation from the faculty, stating that the candidate had completed a required pedagogical course while in the institution, and which included the subjects of the examination, should be accepted for all except possibly the thesis. There might be a gain in still requiring this to be stimulated, with the other evidence, to the certifying authorities.

If the leading states of the North Atlantic, North Central, and Western groups were to provide for such supervisory certificates, making their use optional and giving them the validity, for any purpose, of first-grade teaching certificates, with full inter-county recognition for the second-grade and interstate recognition for the first-grade, the holders would soon make a place for themselves and demonstrate the wisdom of the certificate. In a short time, five to eight or ten years, it would be easily possible, in almost every state in the groups mentioned, to legislate that in the future no new county superintendent (or his equivalent) should be elected (or selected) who did not hold one of these certificates. In still a few years more it would be possible to abolish the lower-grade supervisory certificate entirely, thus securing as the educational leaders of our schools a group of college-trained special students of educational administration. The progress which we could make under such a system of leadership would be very much greater and much more rapid than we now secure.

It may perhaps be argued that under the present salary schedules for county supervision such standards would not be possible. This, however, as we said with reference to teachers' certificates, is a

question with which the educational men of the state need not concern themselves. The present salaries are in many cases high enough for the quality of the service secured. The thing for men in education to do is to demand proper standards, those which are right from an educational point of view, and then compel the taxpayers to provide adequate salaries to secure the class of men needed. We should not be afraid of a shortage in the crop. A shortage is usually a good thing. One main reason why the pay for teaching and supervision is so low today throughout the United States is that, with our very low standards of admission, the crop is always long.

The second important step, and one that ought to follow closely after the first, is the entire elimination of the superintendency from politics. There is the greatest need of such a reform. There is no more reason, educationally, why we should nominate a local Republican or local Democrat for county superintendent, and expect him to stump the county for election, than that we should nominate a Republican or a Democrat from among the voters of a city, and expect him to stump the city for election as a city superintendent, or a high-school principal, or a grammar-school principal. If it is right educationally to vote for one then it is right to vote for the others, and if it is wrong educationally to vote for one, then it is wrong to vote for the others. A county superintendent should be as much an expert educational officer as a city superintendent, a county horticulturalist, a county entomologist, or a county health officer; and the fact that this is not as thoroughly an established principle with the mass of educational men as it is with city superintendents and scientific men is due to the estimate we place upon the functions of the county superintendent. We look upon it as a clerical office, because the number of Kerns and Hyatts is so small that it is only once in a while that we produce, under our present successful practitioner system, a real educational leader.

That better and professional supervision for our rural schools is coming in the near future may be regarded as a certainty, and the position that the county superintendent will hold in the future will be determined by the attitude he assumes toward the two great and much-needed reforms indicated above. If he sees the educational importance of these and works toward their accomplishment, he

will come in time to occupy a position of dignity and importance in his county analogous to that which the city superintendent holds in the city, and his purely clerical work will be done for him by cheap clerks, as it is done for the city superintendents. If, on the contrary, he opposes these reforms from selfishness or from lack of appreciation of their deep significance, then we shall be forced to put a system of educational supervision in over him, reduce him to purely clerical functions, and put him on clerical pay. The future of county supervision will be settled within the next ten or fifteen years in most of our states, and we predict that it will be settled very much along these lines.

County and rural supervision is today a closed field. There is no way to enter it purely on the basis of merit. More, it is a closed field to every man not a resident of the particular county and more or less politically inclined. Political affiliations, political availability, place of residence, and often the political dominance of one party or the other in the county—considerations which have no more to do with a man's ability to be an educational leader of the schools of the county than the church he belongs to, the age of his wife, the name of his baby, or the size of shoes he wears—are considerations which, nevertheless, largely determine the selection of the county superintendent.

In the process of nomination and renomination many accidents happen. A successful superintendent may be sure of renomination, but fail through some eleventh-hour trade made on the floor of the convention. Still more often he fails because his renomination would destroy a good geographical distribution of the ticket as a whole. If renominated, he may be defeated at the polls because of a Roosevelt or a Bryan landslide which carries the other party into power all along the line. Or he may be defeated by a woman, put up by the opposite party purposely to defeat him, and who has sought the office as only a woman can. Perhaps he is defeated by some third-rate country schoolmaster, who puts up the plea that the county superintendent deals with the country schools, and that, therefore, he should come from the country rather than the town. These are not hypothetical cases. The writer knows of at least two actual cases to illustrate each. These considerations are not educational

ones, and education and politics cannot be mixed in any proportions whatsoever without harm to education.

Certain fundamental propositions must be laid down with reference to county school supervision, and these must be insisted upon with emphasis. In the first place, it should offer a career for which a good man would be warranted in making a careful educational and professional preparation. In the second place, a man should be able to enter the work purely on the basis of merit, and free from any unnecessary and irrelevant considerations. In the third place, the office in no sense exists to reward old and faithful teachers, and the position should never be awarded as a charity. In the fourth place, the educational functions of the position should be paramount, and the clerical and legal functions purely secondary. We tend to emphasize the county-office side of the position, and then to defend the bad features of the method of selection on this ground; but there is no argument here that cannot be made to apply with equal force to the work of a city superintendent. We cannot insist too strongly that the first business of the schools is the education of children, and that anything which fails to promote this to the maximum possible is to the extent that it fails a robbery of the child.

The supervision of instruction and the certification of teachers are correlative functions, and should be exercised by the same authority. The renewal of certificates should be based upon success as well as service. The determination of this success is at present difficult, because our county supervision is so thoroughly inadequate. But, as we pointed out at the close of chap. iv, the degree of success attained by a teacher is an important item which should be included in all future consideration of a teacher's application for either a renewal or a new certificate.

The present "closed shop" conditions in county supervision need to be changed. In any attempt to change them the most opposition will come, not from the politicians—for the office has but little patronage, and in making selections for this office the politicians often make mistakes which bring them much undesirable criticism—but from the conservative body of schoolmen themselves. If the schoolmen of a state could once fix their eyes on the horizon and agree on this reform, it could be accomplished tomorrow.

CHAPTER VIII

DEFECTS AND REMEDIES

In the study of present conditions, perhaps the two most significant weaknesses revealed in our systems of certification were the low standards and the great lack of uniformity. To raise and to standardize our certification requirements ought to be the keynotes of future progress.

The amount of common knowledge which we as a people have is increasing so rapidly, our elementary-school curriculum is being enriched so fast, and the general intelligence of our people is becoming of such a standard that the teacher with a meager intellectual equipment should no longer have a place in our educational system. Yet Table III in chap. iii shows clearly that, for the twenty-eight states tabulated, it is possible to secure a third-grade teacher's certificate in 90 per cent. of the number with no educational test beyond the common-school branches; and for the thirty-seven states tabulated it is possible to secure a first-grade certificate, in two-thirds of these states, without giving evidence of knowing anything about a single high-school subject except algebra, and in two-fifths of the states without knowing even this. These low-standard certificates are wholly out of place today and ought to be eliminated at the earliest possible moment.

The great diversity of our requirements and our unwillingness to recognize equivalents are two of our marked educational characteristics. So great is the diversity that a good teacher today is unnecessarily hampered in his ability to move about, not only from state to state, but also from county to county, and often from county to city or from one city to another. Many of these restrictions are not warranted by any educational standards, but are more of the nature of a protective tariff levied on foreign capacity and in favor of home production. This makes the local examination system, with its accompanying barriers, in the nature of a protected industry, and this is not in the interests of good education. The strict county system too often perpetuates the rule of the weak by

shielding them from the competition of the strong. All barriers to competency are wrong.

That these barriers exist has been pointed out frequently in previous chapters, and need only be summarized here. In fourteen states there is no admission to the teaching profession except on examination. In eleven of these states forty or more subjects are required to secure the highest certificate granted, and all must be secured by examination. In fourteen states no recognition is given to diplomas from normal schools or other institutions of learning within the state. The graduates of such institutions are placed on a par with the "graduates" of the country school. In nineteen states absolutely no recognition is given to any form of credential from another state. Only eleven states recognize normal-school diplomas from other states; seventeen recognize college or university diplomas from outside the state; and eighteen recognize a life-diploma or state professional certificate from elsewhere. In a number of our states there is no recognition of certificates from one county to another within the state. Many of these barriers are indefensible, while the defense of others can be eliminated with ease by raising and standardizing requirements.

The great diversity of our requirements may be seen from Table III in chap. iii, and Table V in chap. v. We ought to work toward greater uniformity by the establishment of educational prerequisites, common requirements or norms within subjects, options and equivalents as between subjects, and the entire abolition of certain other subjects from the list of tests. We need to do in the examinations for teachers' certificates what the colleges have done in the matter of entrance requirements—viz., unify as much as possible and then accept evidences of education, equivalent subjects, and equivalent certificates, so far as they go, leaving the candidate to supply the balance by an examination instead of requiring him to pass on the entire list. If this cannot be done by arrangements within states and between states, then we would better work for national uniformity by establishing a national examining and certifying board, after the plan of the College Entrance Examination Board, which will examine teachers, pass on credentials, and issue certificates of such a high standard that our states would be forced to accept them, just as the colleges have been forced to accept the certificates of the above board.

The low standards are also apparent in the requirements for life-certificates. This is evident from Table V, pp. 54, 55. While a state life-diploma ought to be of such a standard that it would be accepted willingly anywhere in the United States, many of the low-standard life-diplomas now granted certainly ought not to be recognized from state to state. A life-certificate, as we pointed out in pp. 54, 55, ought to be led up to by a series of graded certificates, each demanding higher and higher standards; and the state life-certificate, the culmination of a teacher's certificating career, should be given only to those whose education and professional standing single them out as the state's most capable teachers. In a number of our states, on the contrary, a life-diploma is obtainable on the single basis of a definite number of months of teaching, and hence involves no educational standards of any consequence and really stands for nothing.

Each state must, of course, be allowed to set its own standards, and it cannot be expected to accept certificates or diplomas from states having a distinctly lower standard. This should be recognized and accepted, and reciprocity should not be expected. Instead of being "uppish" about it and striking back by way of retaliation, as certain states do because their credentials are not accredited by some more progressive state, they should on the contrary welcome a teacher from such a state because of his better training and what he may bring.

It is possible, though, for most of our states to determine the value of credentials from elsewhere, and to recognize them as far as they apply. The work of California in this respect is most commendable. This state has a published list of accredited universities and normal schools throughout the United States and Canada, and a list of accredited state diplomas. Anyone possessing any of these credentials may be certificated in any county in the state, without examination, and on the same terms as the holders of similar local documents. A fundamental principle in California is that the certification door should always be open for competency, from whatever quarter it may come.

In almost every state, too, these low-standard certificates are good for teaching in any part of the school system in which the holders can secure employment. This should not be allowed to

continue, but a separate high-school certificate should be erected for high-school work, as outlined in chap. vi. Teachers in all branches of the service should be required to know more than they are expected to teach, and the importance of this for high-school teachers cannot be overemphasized.

In the field of supervision we have scarcely made a beginning in the preparation and selection of a body of educational leaders, and we are tied to present practices by a political string. In our lack of leadership we partake of a common weakness of democracy—that of emphasizing the importance of the masses and forgetting the leader who must lead and direct them. The soldier, the lawyer, the doctor, and the engineer have cast aside the apprenticeship and the successful-practitioner methods, but the educator has not evolved that far in his thinking as yet. Our pedagogical departments and the organized body of our pedagogical knowledge are too recent to have reached the point of general use and application. We are in education where the army and navy were before West Point and Annapolis, and where the engineer, the doctor, and the lawyer were a generation ago, before the development of modern professional schools for the training of leaders in these fields. Yet leaders must be trained for work in education, as in these other professional fields, if we are to make any great and worthy progress in the future.

In the matter of examinations, there is great need of our decreasing the emphasis which we now place on the written test. We could greatly improve our certifying systems by erecting certain educational prerequisites and accepting evidence of education in lieu of at least part of the examinations. As fast as can be done, the periodical written examination ought to be diminished in importance as a means of recruiting our teaching force. We ought to insist more and more on securing the educated and trained teacher instead of the raw recruit. Not only should the number of examinations be decreased, but teachers of training or of long and satisfactory experience ought to be relieved of the necessity of frequent tests. There is no valid excuse, for example, for compelling a graduate of a state normal school to pass a county examination before she can teach. If her normal-school diploma does not stand for better education and better professional preparation than the county exami-

nation represents, and if she is not superior to the untrained product of the county examination method, then it is time either to renovate the normal schools of the state and put in a corps of teachers who can produce a better output, or to abolish them entirely and save an unnecessary expense.

The securing of the educated and trained teacher instead of the raw recruit is, however, an economic problem as well as an educational one, though this economic problem has an educational aspect as well. There never can be high educational standards for teachers in such states as Indiana, Illinois, Wisconsin, Missouri, or Kansas—states using the very objectionable census basis for the apportionment of their school funds, and raising but a small general tax—until there is a radical reform in the methods of raising school funds and of apportioning the funds after they have been raised. I have pointed this out in such detail elsewhere¹ that I need only mention it here. There are, in their ultimate analysis, but three primary problems in education. The first is that of how properly to finance a school system. The second is how to secure a trained teaching force for it. The third is how to supervise it to produce leaders for its management and improvement. The financial one always underlies the other two.

By way of giving concreteness to these suggestions, we will indicate a possible general plan for certification, based on the best of our current practice and theory. While not claiming that the proposed plan is perfect, we nevertheless feel that it, or its substantial equivalent, could be somewhat generally adopted with the greatest advantage to our educational work. The aim of the plan is the ultimate establishment and maintenance of high standards for our teaching work, and the method by which it is proposed to attain such standards is that of gradually raising requirements, and thus gradually cutting off the great mass of poorly educated and poorly trained teachers who today work on low standards, work for small wages, and too often serve to discredit the name and work of a teacher.

¹ *School Funds and Their Apportionment*, by Ellwood P. Cubberley, Teachers College. "Columbia University Contributions to Education," Vol. II, 1905; 255 pp.; \$1.50.

PROPOSED PLAN FOR THE CERTIFICATION OF TEACHERS

A. TYPES OF CERTIFICATES

Five types of certificates shall be provided for, as follows:

- I. *Elementary-School Certificate.*
- II. *High-School Certificates.*
- III. *Special Certificates.*
- IV. *Supervisory Certificates.*
- V. *State Life-Certificates.*

I. **ELEMENTARY-SCHOOL CERTIFICATE.**—Good only for teaching in the first nine grades of the public schools, but not good for the ninth grade if the same is part of an organized high school. This certificate to be (at first) of three grades, as follows:

- 1. *Third-grade elementary certificate.*—To be granted only upon examination. Subjects to be all the common-school branches, English composition, civics, physiology and hygiene, and the principles of teaching and school management. Certificate good for one year, and only in the county where issued.

Intended as a trial certificate, not renewable, and not more than two such certificates to be granted to any applicant. Success while teaching under this to be considered in granting future certificates.

(Such a certificate ought not to be granted at all, but is included as a concession to present practice in so many of our states. As soon as the question of taxation and appropriation of funds can be attended to, this certificate ought to be abolished entirely. The first step would be to provide that not more than one such certificate should be granted to any applicant, the second step to provide that it should not be valid to teach in any city or town graded school or any rural school enrolling over twenty-five pupils, and the third step would be to abolish it entirely.)

- 2. *Second-grade elementary certificate.*—To be granted upon an examination on all the subjects required for a third-grade certificate, and, in addition, algebra or geometry, elements of bookkeeping, physical geography and the elements of one other science, and those parts of the school law which have to do with the relations of teachers to pupils, parents, and school officers.

Good in the county where issued, and optional recognition in other counties of the same state. No interstate recognition of this certificate. Good for two years, and renewable for three-year periods, without examination, if the teaching continues to be satisfactory to the supervisor.

This certificate to be granted also, without examination, to the graduates of the state normal schools within the state, and to the graduates of accredited normal schools from without the state, where the normal-school training is based on a common-school education, and hence has not been preceded by a high-school training.

(In time to come this certificate should be abolished also. The first step would be to refuse to renew it without a new examination, and to limit it strictly to the county where issued. California reached the point, in 1901, where a certificate somewhat equivalent to this could be entirely abolished, and it was done.)

3. *First-grade elementary certificate.*—To be granted upon an examination on all the subjects required for the second-grade certificate, and, in addition, vocal music, drawing, general history, English and American literature, one additional science, and one other subject of high-school rank to be determined by the candidate.

This certificate not to be granted to any applicant who has not had either at least two years of successful experience as a teacher, or normal-school training as required for the certificate.

This certificate to be good in any county of the state, to be issued for five- or six-year periods, and to be renewable, without examination, so long as the holder continues to teach or to be engaged in educational work. Full interstate recognition of this certificate.

Successful teachers, holding live second-grade certificates, may, on recommendation of the supervisor, be credited with all the subjects required for a second-grade certificate, and be granted a first-grade certificate on passing a satisfactory examination on the additional subjects.

This certificate to be granted also, without examination, to the graduate of any state normal school within the

state, and to the graduates of accredited normal schools without the state, where the normal-school training has been of not less than two years' duration and based upon a full four-year high-school course, or its equivalent in a private institution; and also to the graduates of accredited colleges and universities who have also completed a normal-school course intended for college graduates, and who intend to teach in the elementary school.

In the case of normal-school and college graduates who have not had two years of experience as a teacher, this certificate to be issued at first for two years only. If recommended as successful, then the certificate to be renewed for five- or six-year periods, as indicated above.

(In time, this should come to be the only elementary-school certificate granted, and it should be recognized between states as freely as between counties within the state.)

4. *Examinations for these certificates.*—Examinations for these certificates should be given in each county, on questions uniform throughout the state, and not oftener than four times a year. Whether these examinations should be under the control of the state board of education or the county superintendent is not of fundamental importance. As soon as the number entering teaching on credentials will warrant, the examinations ought to be reduced to twice a year, say December and July, and later they can be reduced to once a year, which should be in the summer. When the number taking these examinations has been so reduced that many counties have no applicants, and most of the others only a few, as is the case now in California, then the state board of education should take charge of the examinations and arrange for them to be held at a stated time each year, and at only five or six places in the state.

- II. *HIGH-SCHOOL CERTIFICATES.*—Good for teaching in any regular high school, six-year high school, or the seventh and eighth grades in graded city schools. May also be accepted by a county superintendent for elementary-school work in his county. This certificate to be, at first, of two grades, as follows:

1. *Second-grade high-school certificate.*—To be granted on the presentation of evidence that the applicant has taught successfully at least one year, and has completed at least two years of study beyond a full high-school course in some reputable college or university, and on a written examination covering (1) oral and written English; (2) two lines of high-school work which the candidate is prepared to teach; and (3) the general theory of secondary education, the theory and methods of instruction in the two lines of work offered, and class management.

This certificate to be issued at first for two years. If the candidate is reported as a satisfactory high-school teacher, it may be renewed for three-year periods, without examination, so long as the holder continues to teach. Optional recognition between counties, but good only in "non-commissioned" high schools or "unaccredited" ones, or for grade work, as indicated or accepted.

(This certificate in the nature of a transition certificate, while the state is growing used to the idea of a separate high-school certificate. At first, it might be necessary to accept normal-school training as a substitute for the required college work, but this is inadvisable. As soon as the supply of college-trained teachers equals the demand, this certificate ought to be abandoned entirely.)

2. *Fist-grade high-school certificates.*—To be granted on the presentation of evidence of having completed a full college course in some reputable college or university, and of having made preparation to teach one or more lines of high-school work. The diploma of graduation to be accepted as evidence of general academic preparation, but the candidate must also either—
 - a) Pass a written examination on the general theory of secondary education; the purpose and methods of instruction in the subject or subjects he has prepared to teach; and class management, or
 - b) Submit a satisfactory recommendation from the faculty of the institution in which he secured his training to the effect that he has satisfactorily completed such pedagogical courses. This exemption from the peda-

gical examination to expire after two years, unless the candidate engages in teaching or some form of educational work.

This certificate to be issued at first for two years. If the candidate is reported as a satisfactory teacher, then the certificate to be renewed for five- or six-year periods, and to be valid so long as the holder continues to teach or to be engaged in educational work. This certificate to be good in any county in the state, and to be recognized freely between states. Good in any kind of a high school.

(California has gone even farther. The number of properly certificated high-school teachers was so in excess of the demand that in 1905 the requirements were raised to include one year of graduate study.)

3. *Examinations for high-school certificates.*—No examinations to be given by which a teacher can secure a high-school certificate *wholly* on the basis of an examination. The educational prerequisite must be insisted upon. The examinations as provided for above to be given not oftener than twice a year. (Later this ought to be reduced to one examination, held in the summer.) These examinations should be under the control of the state board of education or examiners, or the state superintendent, as county boards will frequently find difficulty in examining candidates for this certificate. The questions and grading should be uniform throughout the state, the county superintendent acting for the state authorities in giving the examinations and transmitting the papers.

III. SPECIAL CERTIFICATES.—In recognition of certain special lines of school work, a few special certificates will need to be granted.

1. *Kindergarten certificates.*—To be granted to those who hold or secure a first-grade elementary certificate, or who present evidence showing that they are graduates of an accredited normal school, or of a four-year high school (or an equivalent private school), and who present satisfactory evidence that they have completed a kindergarten training-

course in a state normal school or in a reputable private kindergarten training-school.

Certificates granted at first for two years, and on satisfactory evidence of successful teaching to be renewable for five- to six-year periods so long as the holder continues to teach. Valid in any county of the state, and optional interstate recognition.

2. *Special certificates*.—To be granted to those who hold or secure a first-grade certificate, or who present satisfactory evidence that they are graduates of an accredited normal school, or of a four-year high school, and who, in addition, present satisfactory evidence of having made special preparation to teach the special subject or subjects for which a certificate is asked.

Such special certificates to be granted at first for two years. If the candidate is reported as a satisfactory teacher, then the certificate to be renewable for five- or six-year periods, so long as the holder continues to teach.

Special certificates shall not be issued except for music, drawing, physical training, manual training, domestic science, instruction in special schools for the deaf and blind, and commercial, industrial, and technical work.

(It is very desirable to limit special certificates rather closely, and to insist on, as nearly as possible, the standards required of regular teachers in the same kind of school work. The great danger of the specially certificated teacher is that he may represent a decidedly lower general educational level than the regular teachers of the school. Special certificates should not be granted to teach the regular studies of a high-school course, but a general high-school certificate should be insisted upon.)

- IV. *SUPERVISORY CERTIFICATES*.—These to be primarily for the encouragement and singling out of the educational leader, and to be of two grades, as follows:

1. *Second-grade supervisory certificate*.—To be granted to the graduate of any accredited normal school who has taught at least two years in the state where the certificate is issued, or to the holder of a first-grade certificate who has had at least thirty months of teaching experience, one-

half of which must have been in the state where the certificate is issued, and who, in addition, passes a satisfactory examination on educational psychology, the theory and administration of education, school hygiene, the history of the state's educational system, and the school law of the state, and who prepares a satisfactory thesis on one of a number of assigned topics. Said thesis is not expected to be "original" in its treatment, but should show grasp of the subject and power to think clearly.

Only one examination each year. This to be uniform throughout the state and under the direction of the state board of education, the state board of examiners, or the state superintendent.

This certificate to be issued for a five- or six-year period, and to be renewable, without examination, on the presentation of satisfactory evidence that the holder has been a successful principal or supervisor, so long as the holder continues to teach.

Certificates to be valid anywhere in the state, with optional interstate recognition. This certificate to be good for supervisory work or for any form of teaching for which a first-grade elementary certificate would be valid.

(This certificate is intended to recognize the successful practitioner who can give evidence that, by private study, he has kept himself abreast of the times.)

2. *First-grade supervisory certificate.*—To be granted to any teacher who has had at least two years of teaching experience, who holds a baccalaureate degree from a college requiring a four-year course, and who, in addition, either—
 - a) Submits a recommendation from the faculty of the college stating that he has completed a thorough pedagogical course of study which has included all the examination subjects required for a second-grade supervisory certificate, and, in the estimation of said faculty, is fitted to do supervisory work in the schools of the state; or
 - b) Passes the written pedagogical examination as required for a second-grade supervisory certificate. This cer-

tificate to have the same validity as the second-grade supervisory certificate, and in addition to be recognized freely between states.

- V. STATE LIFE-CERTIFICATES OR DIPLOMAS.—With the standards just given for first-grade certificates, state life-certificates become of much less importance and significance. Each of the higher grades of certificates so far given, with their general state validity and repeated renewals, is practically a life-certificate. Still, as these diplomas have a certain recognition and standing, it will be wise to continue them, though gradually raising the standards for granting them and making them stand for distinguished excellence.

These life-certificates should be of three forms, but be recognized as of somewhat equivalent rank and dignity. Each form of certificate to be for life, and to be good anywhere in the state, and for the same grade of instruction as local certificates of the same name. Such life-diplomas should be given full and complete interstate recognition.

But one examination to be given each year for these certificates. This to be given under the direction of the state superintendent or the state board of education, and at only a few places (eight to ten) in the state.

1. *State life elementary certificate.*—To be granted only to those who have taught at least fifty months, one-half of which has been in the state where the certificate is issued, and who have taught for at least two years on a first-grade elementary certificate. Adequate evidence of successful experience and professional growth must be submitted.

In addition, candidates must pass a written examination on educational psychology, the history of education, current theory, and problems of the elementary school, and prepare a short paper on some topic relating to method as applied to the elementary curriculum or to the theory of education as applied to the elementary school. A number of topics for this paper to be announced at the examination from which candidates may select.

2. *State life high-school certificates.*—To be granted only to those who have taught at least fifty months, one-half of

which has been in high-school work in the state where the certificate is issued, and who have been teaching for at least two years on a first-grade high-school certificate. Adequate evidence of successful experience and professional growth must be submitted.

In addition, candidates must pass a written examination on the history and theory of secondary education, present problems of secondary education (comparative as well as local), and prepare a paper of some length on one of a number of topics to be assigned at the time of the examination, covering some point in the method and purpose of instruction of some subject taught in the secondary school, or the general theory of secondary education.

3. *State life supervisory certificate*.—To be granted only to those who have taught at least fifty months, at least one-half of which has been as a principal or supervisor and on first- or second-grade supervisory certificate in the state where the certificate is issued. Adequate evidence of successful experience as a supervisor and of professional growth must be submitted.

In addition, candidates must pass a written examination on the history of education, the theory (or philosophy) of education, principles of city and state school administration, education in the leading European states as compared with America (general principles, based on assigned reading), and must prepare a paper of some length on one of a number of topics, submitted at the time of the examination, and covering some point in the administration or the theory of education.

B. CERTAIN FEATURES OF THE PLAN

- I. No city certificates to be issued, except perhaps in a few of our very largest cities. Cities must accept the state certificates, so far as they go, but are at liberty to refuse to employ those not holding first-grade certificates; and those not having had a certain degree of education, professional training, and teaching experience; and to subject those who meet these standards to a further professional and competitive test.

2. No temporary or special certificates to be issued except to those whose credentials would insure them a regular certificate, without examination, at the next meeting of the board of examiners or the county board of education.
3. No state professional certificates as distinguished from life diplomas, as the standards set for the first-grade certificate and their general state validity make a state professional certificate unnecessary.
4. Gradual separation and erection of a high-school certificate, based on education and training, and with no method of securing it *wholly* on examination.
5. Definite provision for the development of the educated leader as opposed to the successful practitioner.
6. Gradual curtailment of special and temporary certificates, and the insistence, as fast as possible, that the educational standard for these shall be somewhat equivalent to that demanded for regular certificates of equivalent grade.
7. Gradual curtailment of the number of examinations given for all grades of certificates, with a view to emphasizing training and education.
8. Abolition of all fees for examinations, certificates, or renewals. Evidence as to good moral character to be required for all forms of certificate.
9. Freeing the successful teacher from the necessity of continual re-examinations, so long as he (or she) continues to teach in a satisfactory manner, but limiting him in the matter of movement and availability for the best positions unless he obtains a high grade of certificate.
10. Close association of the supervisory and certificating functions, thus making reports as to a teacher's efficiency of some real value.
11. Providing for the renewal of certificates, after the probationary period has been passed, rather than granting full life-certification on any standard lower than that required for a state life-certificate. Under an adequate system of supervision the renewal could be made of educational significance. There would be no serious objection, however, to making a first-grade certificate a permanent county

- certificate, after the second renewal, valid so long as the holder continues to teach in the county.
12. The full recognition of normal-school and college diplomas, though at first for only temporary two-year certificates. After evidence of successful experience, these to guarantee the holder a long-time renewable certificate of general validity, which is practically a life-certificate.
 13. The recognition of normal-school and college diplomas of equal rank from other states, and on the same basis as similar local documents.
 14. As fast as can be done, our state normal schools should pass from an elementary-school to a high-school basis of admission, and then concentrate their efforts on giving two years of high-grade academic and professional training. This has already been accomplished in a few states and should be extended as rapidly as possible to all. The graduates of such schools would then receive first-grade certificates without examination.
 15. Full inter-county and interstate recognition, for teachers of experience, of all regular first-grade certificates.
 16. Recognition of equivalents and options in examinations, and in measuring the value of certificates from other states.

If some such plan for the certification of teachers were adopted generally by our leading states, it would be a most potent factor in the elevation and improvement of the schools of the entire country. The effect of such standards in California has been most beneficial from every point of view. Each increase of standards has been accompanied by certain "growing pains," but the result has soon demonstrated the wisdom of the action. Such doubtless will be the case elsewhere. A movement looking toward the general adoption of some such standards ought to be urged in our various state teachers' associations, and might well enlist the active efforts of our National Educational Association as well. It would be a cause worthy of their steel.

DISCUSSION¹

A REVIEW OF GEORGE P. BROWN'S "TEACHING OF ENGLISH," IN THE "FIFTH YEARBOOK" PART I

JOHN A. H. KEITH
Normal, Ill.

It is somewhat difficult to write a critical review of a paper in which the author expressly states (pp. 10, 11) that his discussion is not addressed to those who object to "confounding metaphysics with psychology;" in which one who enters any such objection is at once classified with those who "crucified, in fact or in spirit, Galileo, Copernicus, Luther, Socrates, Darwin, Jesus of Nazareth." And it is still more difficult to write a criticism when one esteems highly the author of the paper and recognizes the great worth of his services to the cause in which both author and critic are engaged. Yet it seems necessary, in this case, to record a protest against certain aspects of Mr. Brown's paper.

I

The fundamental idea in Mr. Brown's paper is that no one can be as efficient as a teacher ought to be unless he has a "view of the world" (pp. 5, 15, 61). In the ordinary meaning of this phrase, everybody has "a view of the world," even very young children. This fact is explicable in terms of the tendency of the mind (partly conscious and partly unconscious) to combine its experiences into some sort of unity, to bring everything known into relation. This tendency is the germ of philosophy, but it is not philosophy any more than a child's cooing and kicking are singing and walking. Mr. Brown takes it for granted that "a view of the world" is the same as a completely elaborated system of philosophy. His whole treatment implies that the teaching of English (and of other subjects?) can be of no avail unless every step of it proceeds from a philosophy to which the secrets of star-dust are as open as is the falling of leaves to the ordinary man.

We are asked by Mr. Brown to think of the universe as "a process composed of an infinite number of processes" (p. 5). These processes seem to be reducible to Source, Separation, and Return (p. 8). It is easy to think of vapor rising from the ocean, falling upon the earth, and returning to the ocean; and easy, also, to name these stages as above. But one might just as

¹ Requested by the Editor.

easily start with clouds as the Source and complete the cycle back to cloud again, so that what we called Source is simply the point of departure in our own thinking. When, however, the author says, "The solar system rises from star-dust and is to pass on into star-dust again," it is not so easy to follow. But, granting for the sake of argument that this is another case of Source, Separation, and Return, the cycle will have to keep repeating itself in order to be a *process* at all. This isn't much of an explanation of the universe after all, for it simply says that the cycle will never cease—without explaining anything.

But beyond this first "cycle interpretation" is another, viz., "the Absolute Cycle, from which all minor processes spring, is the Absolute Ego or Person" (p. 9). This is nothing more than the assertion that a dynamic God is the center, circumference, and area of all that is. All this may be assented to, but what of it? One is simply back to the conception of all that has been, is, and is to be as proceeding from a Source that is not different from the Separation and Return before mentioned. To this conception regarded as a matter of faith there is and can be no objection. As a preliminary postulate for philosophizing about the origin and destiny of the world, there is no objection to it—if the one who makes it enjoys it. But to call this conception "scientific" is to lapse mentally into an inability to distinguish between that which is verifiable and that which is simply postulated. It is true that scientists make use of hypotheses, but it does not follow that all hypotheses made or believed by scientists are verifiable. The "power of correct prophecy is the test of scientific knowledge and . . . verifiability by any competent observer is its diagnostic symptom."³ Iteration, even with solemn emphasis and full belief, is not proof; hence, the repetition by Mr. Brown of this notion of the Absolute Cycle really weakens his argument.

Still more startling is the "fact" which Mr. Brown infers by "what seems (to him?) to be a scientific procedure," that "the human soul is the active agency by which the cycle of the universe is to be finally completed." This bald and incomprehensible statement is prepared for by the assertion that this inference follows "from the acknowledged facts above set forth" (p. 9). It seems to me that the facts to which he refers (Absolute Cycle, minor processes, Source, Separation, Return, etc., with their metaphysical implications) are neither "facts" nor "acknowledged." Mr. Brown realizes that few people appreciate the fact that they are "the active agency by which the cycle of the universe is to be finally completed;" and so, in order to make the "fact" still more obvious (?), he says: "God, the world, and man are all one psychical process, no arc of which is any more illusion than

³ E. L. Thorndike, *Fifth Yearbook*, p. 81; read also p. 82.

any other" (p. 9). In this unity everything finds its matrix; in this psychical process all distinctions are dissolved. To quote (p. 10): "We repeat that the Absolute Psyche is identical with the limited psyche, in some degree, in every object of nature and in every human soul." In this quotation we are again given repetition instead of proof.

Philosophy, even of the speculative sort, has a value for human life. It is the outcome of reflection, experience, and the fundamental tendency to form "a view of the world." However valuable and inevitable this philosophic activity may be in our species, it does not follow that its outcome, in the child or in the adult, is scientific. Therefore, it seems to me that in his "point of view" (pp. 5-11) Mr. Brown has confused the vague, impressionistic "view of the world" which most people have with "philosophy" in the more technical sense of an "explanation of the world-problem;" and also confused "philosophic," in the latter sense, with "scientific." This confusion of terms not only obscures the view itself, but also provokes doubt of its validity. It may be that Mr. Brown's argument is so deep that we who have not been chastened by the acceptance of animism or pantheism as fundamental truths are unable to follow it, because the scales have not fallen from our eyes. Or, it may be, there are "errors of refraction" in the mental make-up of all of us.

II

The "point of view" which identifies God, the world, and man "as one psychical process" prepares the way for Mr. Brown's "genetic psychology." The "one psychical process" in the form of instinct (life within?) leads each individual to a "series of psychical changes which repeat the psychical changes in the growth of the race." Feeling, memory, imitation, imagination, love of power, etc., are the outflow of the "Absolute Psyche." It is difficult to accept this idea and reconcile it with the further idea (pp. 12, 15) that there are negative tendencies toward degeneration. If it be true that the Absolute Psyche repeats itself in everything that is, then how can we explain these downward tendencies? We must not think of them as extraneous to the absolute. We are forced, then, to think of an Absolute that has to degenerate in order that it may develop, or to think that degeneration and development are the same to the absolute. The "genetic idea" to which this leads is that "all is well."

Mr. Brown practically commits himself to "an evolution which is directed by a purpose," and assures us that this is not a "new view to the modern scientist." My acquaintance with the writings of Huxley, Darwin, and Spencer—three modern scientists—has never hinted to me that these men accepted, as basic truth, the conception of an evolution which is directed by a purpose, except as the progress of man is regarded as evolution. To

admit an evolution with an advantageous outcome in some cases and a disadvantageous outcome in other cases is to deny that a purpose is back of all evolution, or is to admit that degeneration and development are the same in meaning. To regard the movements of wind-driven, withered leaves as comparable to the movements of a man in building a house is hopelessly to confuse the term "purpose." To say that the disintegration of exposed sandstone and the painting of a picture are guided by purpose is to befuddle thinking. This may be allowable as a case of "poetic license," but it cannot pass current for scientific thinking. And while we may be entertained by the bold speculations of scientists and philosophers, we must stick to the verifiability of theories as a test of their scientific character.

Mr. Brown's confusion of the speculative with the scientific leads him to assert that memory "has ever been present on the evolutionary journey from star-dust to child, being the force of gravity which holds the universe together and becoming conscious first as feeling" (p. 13). Reduced to syllogistic form the argument is:

Gravity holds things together.

Memory holds things together.

Therefore, memory and gravity are basally one.

The fallacy of such a syllogism is too evident to require any comment.

There is a genetic psychology, but it is not at all evident that the "Absolute Psyche" in its "minor processes," as set forth by Mr. Brown, is a scientific explanation of developing mind; for it seems that the character of the stimuli brought to bear upon the child brings about, through the child's reactions, not only a direction of growth, but also, by modifying the child's mind, brings into existence an organization of mind that would otherwise not have been.

The fundamental objections to Mr. Brown's genetic psychology are (1) that by charging it all to the nature of the Absolute Psyche he cannot explain the dualism involved in his use of the terms "degeneration" and "development," and (2) that, therefore, the formative influence of experience of different types is practically ignored.

III

How Mr. Brown's bold speculations connect with his analysis of method of teaching English in the schools is as difficult to comprehend as is his metaphysics. When he says, "The prevailing conscious attitude of the pupil in every grade must be a desire to attain an end. The primary function of the school is to supply the environment that will awaken the desire" (p. 63), we not only agree, we applaud. We are relieved to discover that we can comprehend this truth without pretending to know anything about "star-

dust" or the "Absolute Psyche." We are pained to find no reference to the social environment as a factor in the growth of language and in the awakening of desire in the child. We can even agree with what is said about grammar (pp. 64, 65), if we can do so without committing ourselves to the view that by judgment "the instinctive soul of the world comes into consciousness of itself" (p. 6).

A scientific method is usually inductive; i. e., it proceeds from known facts to their underlying principles. Mr. Brown reverses the process, and is therefore essentially deductive in his entire argument. He fails to show how his "point of view" works out into plans for teaching English in the schools. The metaphysics and pedagogy are as unlike and as unrelated as if they had been written by different men—one a speculative soul with poetic instincts, and the other a hard-headed, successful teacher who had learned by experience. Had Mr. Brown given us his pedagogy of teaching English first, and then showed us how this pedagogy involved the particular modification of the philosophy of Plotinus which he accepts, more of us might have followed him, and all of us would have recognized the scientific method.

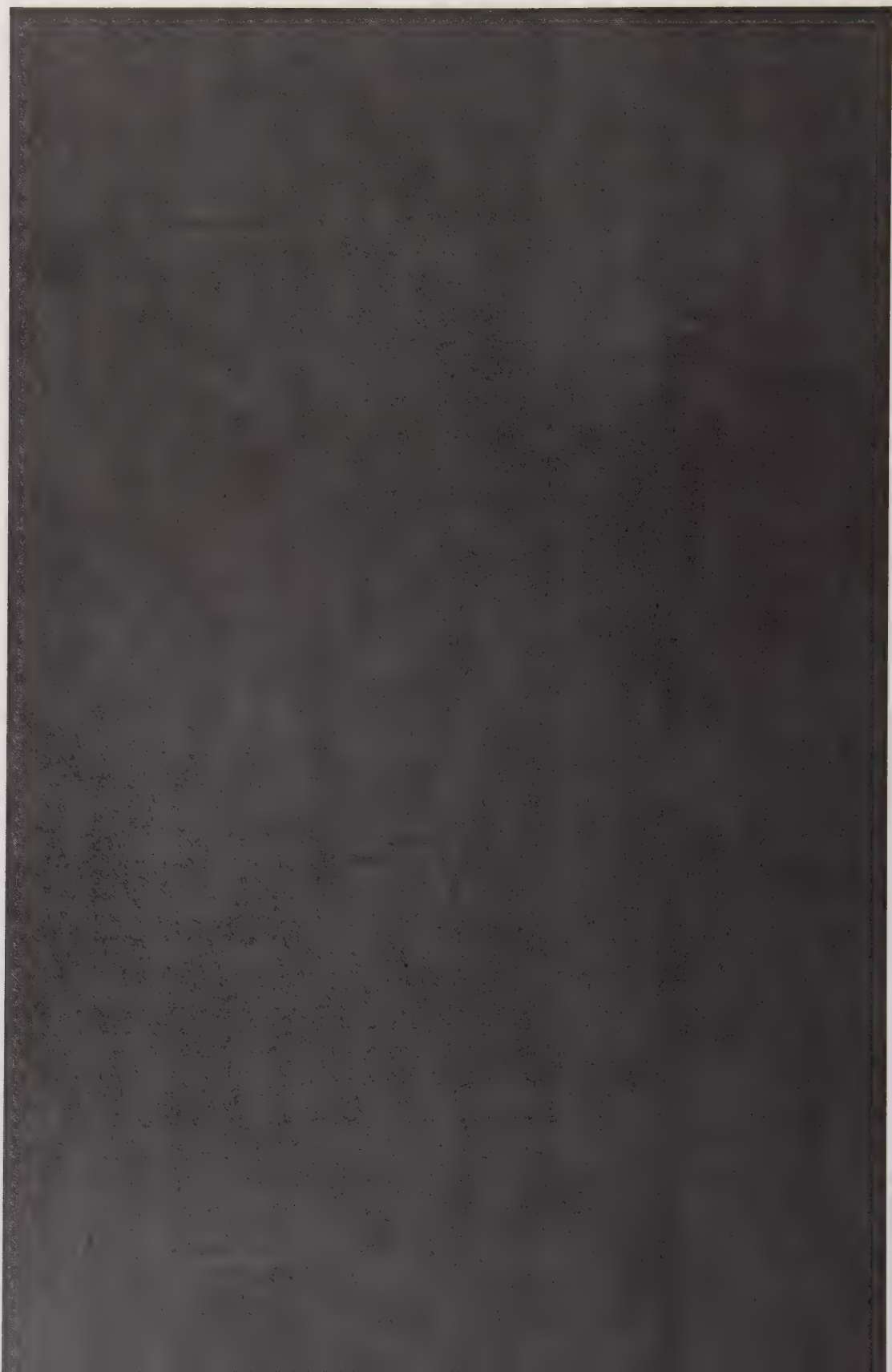
The great element of variability in all speculative solutions of the world-problem renders metaphysics a shifting sand, rather than a solid rock upon which to build a body of educational principles. If we must understand the genesis and destiny of all that is before we can do anything that is worth while, the actual workers in the educational field would better quit.

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THE SIXTH YEARBOOK

OF THE

NATIONAL SOCIETY FOR THE SCIENTIFIC
STUDY OF EDUCATION

PART I

VOCATIONAL STUDIES FOR COLLEGE
ENTRANCE

THE PAPERS WERE DISCUSSED ON WEDNESDAY, FEBRUARY 22, AT 4:00
O'CLOCK P.M. IN THE ARDEN HOTEL,
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BY

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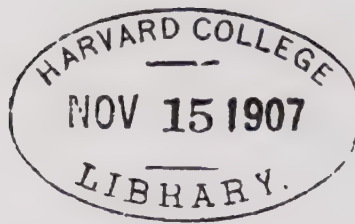
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EDITED BY

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SECRETARY OF THE SOCIETY

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THE SIXTH YEARBOOK

I

VOCATIONAL SUBJECTS FOR COLLEGE ENTRANCE REQUIREMENTS

CHEESMAN A. HERRICK

Director School of Commerce, Central High School, Philadelphia

COLLEGE ENTRANCE REQUIREMENTS: A LOOK BACKWARD

Progress in dealing with college entrance requirements for a hundred years should be to the student of education a cure for pessimism. Down to 1807 the standard requirements were Latin, Greek, and arithmetic, but in that year geography was added to the list, and later English grammar, algebra, geometry, and ancient history were included. The teaching of astronomy in college and school led to a recognition of this subject and finally in the first half of the period a general treatise on the physical and chemical sciences under the title of natural philosophy was also accepted.¹ Marked interest in the study of the natural sciences and the modern languages in the third quarter of the nineteenth century led to a recognition of these subjects as deserving a place in the studies for college admission.

The most valuable single discussion of secondary studies yet made was that by the conferences arranged through the Committee of Ten which conferences covered the general field of secondary work and gave us a valuable statement of educational values of subjects to be studied in secondary schools and somewhat of how these values can be realized. Probably no single piece of work has done so much to unify and correlate secondary education as has the famous report of the Committee of Ten. In 1899 a further committee on college admissions submitted a report to the National Educational Association which supplemented the report of the Com-

¹ Brown, *The Making of Our Middle Schools*.

mittee of Ten and formulated courses of study with more thought of their satisfying the requirements for college admission.

In the reports mentioned above there is clear evidence of the dominance of the college influence. But parallel with the movement that is evidenced in these reports there has been a marked growth of interest in more practical subjects of study that originally came from outside the sacred circle of college entrance studies. These subjects are now asking for recognition along with others which seek to prepare for study in higher institutions. The first marked tendency for vocational education in the secondary schools was the outcome of the Centennial Exhibition of 1876.

The striking results of European manual training schools were there represented in foreign educational exhibits. There was also embodied in the exhibits of the American states the material achievements of a hundred years. These two object lessons gave the impulse for a new educational propaganda, expressed in the motto: "Send the whole boy to school." Many of us remember the bitter controversy over manual training in the eighties, the attempts to discredit it by those high in educational influence, but we also note that manual training has steadily gained ground, that it is now recognized practically everywhere as sound educationally, and it has reached such a stage in development that it can reasonably request the higher institution more to generally recognize its educational worth by having it included in the list of subjects for which college admission is granted.

In the early eighties there began in a crude way the introduction of commercial studies in public and private high schools. The impulse for such an innovation was the competition of the private business school and the demand of communities that our secondary schools should not only give a good education but one also that is good for something. At first these commercial courses were abbreviated as to time and impoverished in curricula, but by lengthening them so that they are equal in time requirements with other courses of a similar grade and enriching them with more practical interpretations of older studies, and the introduction of new subject-matter in the way of applied economics and technical business subjects these commercial schools have been improved until they may fairly claim a place educationally with the other forms of high-school

education and they, as well as manual training, are making demands upon higher institutions for the admission of their students.

Lastly there is beginning to be felt the demand of special education for women. The pressure for recognition of domestic science or home economics courses may still be in the future, but it is as inevitable that the demand for these courses will be made as it is that they will become a recognized part of our education for girls.

RELATIONS OF THE COLLEGE AND THE SCHOOL

Undue credit for the influence of the college on the school has been assumed by the college authorities. The high school, as has been pointed out by the recognized authority on the history of these schools, was originally the extension upwards of the elementary school, and its policies have been formulated by the educational forces below it and by the demands of the community outside of the school as well as by the insistence of the college authorities upon a certain requirement for admission. The Committee of Ten termed the proportion of secondary pupils going to college as insignificant, but more striking than this is the fact that despite the pressure of the colleges, the pupils in the distinctively preparatory courses have not increased relatively with the increase of those not preparing for college. This statement is true for both public and private schools. In 1892-93 the percentage of those preparing for college in public high schools was 14.6. Eleven years later the percentage of those so preparing in the same schools was 9.54. In the private schools for the same period the percentage had fallen from 26.5 to 21.47³

The seventh question propounded for the several conferences in connection with the Committee of Ten's report was: Shall subjects be taught differently to pupils who are going to colleges, to those who are going to a scientific school, and to those who presumably will not enter upon higher studies? In the letter of transmission the Committee says that this question was answered unanimously in the negative. The answer to this question, however, provoked much discussion and called forth dissent. For instance, one writer attempted to show that the question was answered with-

³ Brown, *The Making of Our Middle Schools*, p. 418; *Report of U. S. Commissioner of Education*, 1904, Vol. I, pp. xvii, xviii.

out being understood.⁴ The interpretation has been made that those who answered meant to say that college preparatory work is the best work that could be furnished in the secondary schools and there is still a general opinion for which no doubt the college influence is responsible, that the best education which can be given in the schools is of the traditional college entrance type and that as many as possible of the pupils should be led to take this kind of education even though they do not go to college. We shall no doubt ultimately come to an acceptance of the unanimous answer of the Committee of Ten's conferences though perhaps not in the way all the conference meant the answer, certainly not in the way that some have interpreted both the question and the answer. But we shall accept it rather as a statement of the idea that the business of the school is to furnish education and that it should devote itself to this business for all who come to it for instruction regardless of their ultimate destination being attendance at a college.

THE ENDS OF COLLEGE ENTRANCE TESTS

We may well ask the question of Mr. Prettyman's paper in the following collection, do college entrance requirements signify subjects or power? If subjects there is little to be said, but if power then vocational education is entitled to a hearing. And let us also remember that power is to be expressed in feeling and action as well as in thought. One claim of practical studies worthy of consideration is that they relate thought to action. In formulating and enforcing the entrance requirement due regard should be given to the quality and temper of students, their attitude and capacity; if this be not so the colleges will be taking the symbol for the thing symbolized, the form for the spirit. Some of us cannot get away from the conclusion that what the colleges should ask is not a particular "brand" of knowledge but the evidence of maturity of mind and seriousness of purpose on the part of those who seek admission.

Miss Mary E. Haskell in a recent investigation of examinations for non-college going girls was led into a consideration of the training of the girls who go and those who do not go to college. The conclusion was inevitable that there should be less difference than there now is in the treatment of these two classes of pupils. The sug-

⁴ Butler, *Educational Review*, December, 1896.

gested way to secure uniformity is also as we might have expected. It is by giving less of college entrance education and more of education. Miss Haskell reports that in her correspondence with schools fitting for college she found a very general evidence of the feeling that college entrance requirements could be modified with gains to the pupils going to college and she reaches the conclusion, "we feel so much certain hamperings over our work with the college preparatory girls that we are very desirous, for their sakes as well as for the larger body of girls who do not go to college, that a modification should be brought about in the college entrance requirements." ⁴

The suggestion of Professor de Laguna's paper which follows appears a fair way out of the present difficulty when taken in connection with the admission requirements of the University of Michigan. But these requirements differ widely from the practice in general, and particularly so from that in the East. The attempt to follow both general and vocational studies at one time is almost sure to lead to overloading the curriculum which will result in lowering the educational results for all the studies. As the requirements for college admission are now pretty generally enforced it is only the student of special ability in the vocational schools that is able to secure admission for advanced study, or he secures this admission with a heavy disability because of conditions. Harvard's entrance requirements themselves stagger the average student in the secondary school and put him to the test of his best endeavor for four years without any side issues by way of vocational subjects.

The present differences between the practices of the East and the Middle West are fairly shown by comparing the demands made in the paper of Mr. Holmes with the entrance requirements of the University of Michigan as set forth by Professor de Laguna. May it not be that the liberalizing of entrance requirements with the recognition of more modern and more practical studies will come from the democratic community institutions of the Middle West and that the institutions in other sections of the country will be led to an acceptance of the practice after its workings have been demonstrated. We may grant the validity of Professor de Laguna's argu-

⁴ *School Review*, December, 1906.

ment but his premises lay an obligation for a very general modification in our practices with regard to college admission in the country at large.

AIMS OF SECONDARY EDUCATION

In any discussion of secondary education or college admissions we should keep clearly before us the threefold purposes of the middle schools as they have been set forth by the present United States Commissioner of Education. These purposes are: first, a better adjustment of the middle schools to the schools that are above and below them; second, a better adjustment of these schools to the capacities of their students; and third, a better adjustment of them to the changing needs of our societies. We may, I think, raise the reasonable question whether the first part of the first aim has not exercised an undue influence over the secondary schools. Some years ago a university president, speaking to a company of schoolmen declared that a system of education should be like a pyramid which all the way down takes its shape and its proportions from the apex. His suggested apex is the university, but we are coming to believe that the stone at the apex is to be influenced by the foundations and the other parts of the structure and is not to give its own shape and direction to the whole. Elementary school, middle school, and higher school should find a harmonious balance one with the other and all must be influenced by, as they should in turn influence, our civilization; and finally we cannot emphasize too strongly that schools and courses, college entrance requirements and vocational studies exist for pupils and not pupils for them.

There will be general approval of the Committee of Ten's declaration that secondary schools are not primarily for the preparation of students to pass special examinations for college admission. Instead, their chief purpose should be to prepare girls and boys for the duties of life. The Committee was direct in the statement that the preparation of students for colleges and scientific schools should be for the average secondary school an incidental and not the main object, but the report recognizes the logical deduction from this fact and passes on to say: "It is obviously desirable that the college and the scientific school should be accessible to all boys or girls who have completed creditably the secondary school course." If this were not

true, then early in the life of the child his educational future, probable destination, and sphere in life are fixed for him and fixed in an accidental and arbitrary manner without taking his own traits and predilections into consideration. There can be no gainsaying that any successful graduate of a secondary school should be eligible for studies in our higher institutions of learning "no matter what group of subjects he may have mainly devoted himself to in the secondary schools."

This was the doctrine of the Committee of Ten's report and by this doctrine we should stand. The natural outcome of the acceptance of this course is to make our vocational schools and courses of true educational worth equal in time and corresponding in the demands which they make with the other forms of secondary education.

Education may set for itself such ideals as the cultivation of intellectual power, and, what is more difficult, the acquisition of the ability to apply power to the matter in hand. If our curricula were made in accordance with these principles, the training of secondary schools will render the double service of making subjects of instruction more practical, and practical affairs more intellectual. We have long had two educational ideals that have existed side by side, but have not intermingled; these are the academic and the apprenticeship. The former earlier gave scholasticism, the classical school; the latter, utilitarianism in education, the workshop. But the old division of studies into educational but not useful, and useful but not educational, is fast disappearing. The useful is found to be intellectual, and much that was hitherto thought to have educational interest only has been shown to have increasing usefulness. At present, three sets of interests at least make demands upon the secondary schools. These are professional or literary, industrial, and commercial. If the demands of these are rationally met and if high schools are properly co-ordinated with the elementary school on the one hand and the universities on the other, we shall have realized somewhat Huxley's ideal of an educational ladder reaching from the primary school to the university. Let this ladder be wide enough to accommodate all who want to ascend it, and let the meaning and the probable rewards of ascent be such that a larger number will want to go up. Practical schools and courses will add to the

number who go through the secondary schools, and this in turn may be made the means of increasing the number who go to higher institutions.

THE OBLIGATION OF THE COLLEGE

The college cannot afford to be an institution apart from the modern school. Our present United States Commissioner of Education has emphasized the thought that our secondary education is indigenous, an expression of the social life of the American people. The number and character of secondary schools is a reflex of our civilization; public high schools are peculiarly the institutions of the people. In several senses these schools are middle schools, but most important they are the meeting place for various classes of our democratic society. Here classes may mingle and learn each of the other.

Certain fundamentals are coming to pass almost by common consent in our educational creed. One of these is that the school is one form of activity in the present social order—society expressing itself in a given way; and another that it is the business of the school to induct men into institutional life, not of the remote past, but of the present. This means of course that we are to treasure and stimulate interest in our historic civilization, but the latter is not the sole, not indeed the chief, purpose of education. More than any other institution the college has set itself aside from modern society both in its own work and in the requirements it fixes for admission. In consequence the college is losing its opportunity to render the largest service both in preserving the traditions of culture and in leavening the whole lump of modern society.

With certain rather cynical remarks made of late that we do not need more students going to college, that there may be too many now taking the higher education, etc., we should have little patience. Of purposeless educational dilettanteism we cannot have too little, and this is one of the results of the traditional college entrance test and a higher education that leads nowhither; of that definite education that relates the training given and the life to be led we cannot have too much, and this is the result of the vocational aims of education. The college owes a debt to society that up to this time it has come far short of paying; more narrowly the college owes some-

thing by way of recognition and inspiration to the secondary institutions that seek to serve community needs. The college owes recognition to that boy or girl who after worthily completing the studies of the vocational school asks for the privilege of further education.

When colleges and universities widen their system of credits or entrance requirements, and touch the schools at more points, the questions of dealing justly with the vocational schools and their students will settle itself. As the instruction within the university is modernized, it becomes easier to recognize modern subjects in the secondary schools. Would not a proper course for the higher institutions be, not to refuse to consider the newer subjects of the vocational school, but by rigid insistence on meritorious work in them help to make these subjects of greater value to those who do and to those who do not wish to go to college?

But of all things most to be desired, let those in the schools escape from the bugaboo of getting into college in a particular way. The boy fitted for getting into life ought not to be thereby incapacitated for getting into college, and if he is, there is something wrong with the college requirements. First let there be schools giving real education—classical, English, manual training, and commercial, and then let the colleges welcome students from any and all of these schools. It is manifestly unfair to compel all students to take a special course for college admission when a small portion go to college; it would be just as unfair to deny college admission to those who have not taken the required course, but who find that at the close of their high-school work that they have the inclination to go to college and that a way has opened for them to do so.

II

EDUCATION VERSUS COLLEGE ENTRANCE REQUIREMENTS

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DUTY OF THE COLLEGE TO THE STATE

Democracy has not yet revealed its full meaning. The grounds of the democratic faith lie too deep to be patent; with every fresh study of them comes new insight into their profundity, and with every attempted application a new conception of their logical effects. We have recently seen the insurance companies taught the lesson of democratic responsibility; the railroads and the packers are studying the same text; and it would seem that holders of colossal fortunes may soon be forced to think carefully about the nature of private property in a democratic society. "Mutualization" is a sign of the times, pointing into untraveled depths of democratic theory.

Education is not exempt from this new activity of republican thought. A highly suggestive study of republican principles bases them upon a conception of man as a free spiritual agent, whose true life is in his main spiritual relations.¹ Among many consequences, dimly seen, of such a conception, there is one, at least, which will be clear to the educator; a democratic society owes to each of the individuals which compose it *all* the education, and *that sort* of education for which as a free spiritual agent in the relation of citizen he has the capacity and the need. This deduction, familiar to many of us as it may be, is far enough from the popular idea of the educational duty of the democratic state to prove that democracy has revelations yet in store.

But in America the democratic faith is strong. Self-government has proved to be only a primary duty. We early inaugurated elementary education, free to all and for all alike the best obtainable.

¹ Joseph Lee, *Charity and Democracy*, *Charities and the Commons*, xvii. 9, Dec. '06, p. 392.

The free public high school is now firmly established, and public sentiment is quick to support the new schools designed to meet special educational needs. Some states offer free collegiate courses, including, besides traditional liberal culture, professional training of university grade. The democratic faith, strongest in educators, may yet lead us to demand of every commonwealth the fulfillment of its whole educational duty;—free higher education, both general and vocational, may yet be universally offered. Be this as it may—it would lead us far afield were we to discuss all that the state may here properly undertake—we may with some confidence appeal to the educator as democrat in favor of a thesis concerning the admission requirements of the college in a democracy.¹ For the educator as democrat will at least recognize the responsibility of the college to the community. He may not be ready to argue for free university instruction, much less for free law schools, but he will admit that the college, like the railroad and the insurance company, should serve the whole public fairly and without respect to persons. He will agree that the college should try to meet every reasonable need of the community it serves. He will agree that it should be quick to recognize a worthy educational demand. In the light of this responsibility to the community, the contention we shall here maintain will not seem overdrawn: college requirements must not operate to debar from higher education any class which has received a secondary education adequate in its grade as a preparation for citizenship.

DUTY OF THE COLLEGE TO THE INDIVIDUAL

But education is Janus-faced; it looks both to the state and to the individual. Not only has the college a responsibility to the community; it has also a responsibility to the possible pre-collegiate instruction of every educable person. To education as a vital personal process that is, the college owes a duty. The college must guard the American principle of equality of opportunity. Class education is rightly, in America, abhorrent. We say to the humblest, "What is open to any, shall be open to you." We have gone far towards providing, at public expense, for the poorest, all that the richest can buy. In this light, college entrance examinations should not be a gate to which only the elect are given the key, but should rather

be a ladder, which all who are strong enough may climb. For education cannot properly be represented by any closed series of parts; it is not properly divisible into one kind which ends at 14, another which ends at 18, and another which ends at 22. The German idea of a kind of schooling, complete at a certain stage, to which each member of a class is foredoomed, is forever impossible in America. We hold education to be an open sea, upon which everyone may sail as far as the winds of his fortune will carry him; or, we look upon it, rather, as a single vital process, the whole virtue of which is the birthright of every citizen. It may be that he will be forced to sell it for a mess of pottage; but in any case it must not be denied him, even in part, while he is still ready to accept it. The whole process, let us note, is his birthright; if he has passed to proper purpose through one stage of it, the next should lie ready to his efforts. As teachers, surely, we should be loth to narrow the path of the pupil, to obstruct it, to turn it whither the pupil can not travel while he has still the will to go forward, or to exact of him a toll he is not able to pay. Once more, from the point of view of the responsibility of the college for the previous training of the individual: college requirements must not operate to debar from higher education any individual who has received a secondary education adequate in its grade to his needs as a man.

INFLUENCE OF THE COLLEGES UPON THE SCHOOLS

Of course we have not the temerity to imply that those who frame college entrance requirements are unmindful of the responsibilities upon which we have dwelt. There seems, indeed, to be a general willingness on the part of the colleges to acknowledge their influence upon secondary school programs. In the conscious exercise of this influence the college authorities no doubt set before themselves the dual ideal of service to the whole community and of guardianship over the integrity of the educational process. So long as there was but one kind of secondary education, the problem was simple enough; but with the introduction of the elective principle complications arose in abundance. Now we have before us the spectacle of secondary schools of special vocational character and of general high schools whose programs are divided into courses constructed to meet special needs,—an ever increasing number of verti-

cal divisions (if the figure may be permitted) of secondary education. It is not this sort of division, of course, against which we have just been contending. College requirements have not created the special schools; they have not drawn the "vertical" lines of cleavage. But the special schools are here, and the college problem is no longer simple.

Fortunately, we shall not here be obliged to take sides upon the exact issue of our problem of electives; enough for the moment if we state our belief in the general principle of education according to needs. We are quite ready to agree that this vertical division should not be carried too far, that it should be guarded by consideration of the interests of the community on the one hand, and of the integrity of the educational process on the other; but if vertical divisions are thus carefully made, we cannot admit that the "horizontal" bar should be raised by external influence upon any of them. The dead stop upon the educational path of any pupil should be raised only at the limit of his capacity. But just here comes in the practical question. If college requirements do not accord with the training supplied in the vocational schools then the training in these schools is educationally a path into the desert. If colleges will not provide for the continuance of vocational education, they stop that education at eighteen. If vocational schools are not recognized, then our "vertical" division has in effect a "horizontal" bar placed upon it by the colleges. The problem of admission requirements can no longer be settled by preparing examinations in the classics and in mathematics.

ATTITUDE OF THE COLLEGE TOWARD THE VOCATIONAL SCHOOL

Our premises, of course, remain to be proved. It may be that we do not supply in our special schools a training adequate as a preparation for citizenship; it may be that our training is too narrow for the needs of the individual as a man, as a free spiritual agent. Let not this obscure the point in question. We assert that our training is thus adequate, upon both counts. The colleges must meet us upon our own ground. If a college will confess that it accepts only intending divinity students, it may narrow its requirements as it pleases, with injury only to itself and to the divinity students. But if a college pretends to supply higher education of a

liberal character ; if it is prepared to send its graduates into every activity of modern life ; if it is, in short, a true American college ; then it must fit its requirements to every proper function of American secondary education. Its requirements then become an authoritative definition of the functions of secondary education. If it will not accept graduates of vocational schools, it asserts that our training is class training. We reply that the refusal of the college to accept graduates of certain forms of high schools convicts the college itself of class training. Either these schools are too narrow, or the college is. If we claim for pupils of the vocational schools the right to continue their studies in college, the colleges cannot deny them that right by reason of special requirements for admission, without taking a stand against our form of secondary education.

Let us suppose, for example, that a graduate of the Boston High School of Commerce finds that he cannot enter X college. What is he to think ? He may believe that his training has not been adequate in its grade as a preparation for citizenship. In this case, the college is guarding the democracy against a class of citizens which, without proper preparation, would yet enter the life of the community under the authority of the college degree. The college must discourage an unjustified pretension to adequate training for the great relation of citizenship. Or, our graduate may believe that his training has not been adequate to his needs as a man. In this case, the college is guarding the integrity of education as a vital personal process. It must not admit to the opportunity of higher education a pupil who has not received a training for manhood. Or, our supposed graduate may take the other point of view. He may believe that the college wishes to serve the needs of only a single class in the community ; he may look upon its narrow requirements as evidence that the college will not recognize all reasonable demands, from whatever class ; he may feel that the college is forgetting its duty to a democratic society. He may believe, moreover, that the college refuses to recognize a worthy function of secondary education ; that it casts a stigma upon a form of secondary training which has supplied in its grade all his needs as a man, as well as some of his needs as a worker ; he may feel that the college is forgetting its duty to him as an individual. This is the issue.

AIMS OF SECONDARY EDUCATION

To support our graduate in one opinion or the other, let us ask ourselves first what the functions of secondary education are. Upon this point, let us admit, we can here do little but present our convictions as clearly and convincingly as possible, and state our authorities. If the exposition is attacked, the argument will demand volumes. For the present we must content ourselves with a broad, firm confession of faith. First, then, we accept Herbert Spencer's working definition of education as preparation for complete living. Following Professor Hanus of Harvard University, we define preparation as participation, and complete living as usefulness and happiness. Under the same authority² we define the special function of the secondary school as "comprising three classes of aims: namely, vocational aims, social aims, and culture aims." A modern secondary school should graduate pupils who can, *first*, earn their own livings; *second*, discharge their duties as citizens; *third*, participate in the refined pleasures of modern life. If there are other aims of secondary education which cannot be brought within the scope of this statement, we do not know of them. We believe that every widely accepted, *practical* formulation of the aims of secondary schools in America is implicit in this one. Philosophical refinements upon these conceptions may of course be made; but in the practical outcome we may rest our case upon these grounds. The youth whose training has been dominated by these aims has laid a foundation for usefulness and happiness.

Two phases of education as we have defined it may attract attention. It is presented as a training for *active* life, and as a training for *modern* life. Let it not be supposed, however, that we are pleading for a commercial ideal. The activities of modern life are legion. We are not attempting to formulate a philosophy of commercial secondary education any more than a philosophy of classical secondary education. Both can find an appropriate place under our definitions; we ask only the same grace for both and an equally cordial welcome at the college doors. For to us, it seems obvious that the classical school is as much a special school as the school of commerce or the school of mechanic arts. We would make the powers

² *A Modern School*, by Paul H. Hanus, Macmillan Co.: 1904, p. 16.

of the pupil "subservient to life's serious purposes," among which the purposes of the scholar rank high. But they are special purposes, comparable to those of the business man or those of the engineer. We applaud classical training as a preparation for divinity, for the law, or for other special activities in which it may be applied. But we deny that it is the sole form of liberal training; we deny, indeed, that in itself it is a form of liberal training at all. Neither do we contend that any form of vocational education is, as such, a form of liberal training. Any form of secondary instruction may at least lay the foundation of a liberal education, if it adequately subserves the three essential aims of a modern school. For these aims include both a liberal aspect of education and a special aspect of education. No man can be useful unless he is master of some form of activity in the life of his day. He cannot be prepared to earn his living, nor to serve the state, nor to participate in the refined pleasures of life, unless he is in some degree a specialist. He must have his own field to till; his own point of vantage; the ground, longed for of old by Archimedes, from which to move the world. Neither can he be truly an educated man without the liberal form of training. He may earn his own living, but he cannot be of wide usefulness, nor find high sources of happiness in life, unless he has laid the foundations of general culture. In our devotion to this ideal of general culture, we do not yield, despite our special aim, to the advocate of any form of secondary training whatsoever.

For practical purposes, then, we may say that the triple aim of secondary education may be subserved by putting into effect these two general aspects—the aspect of mastery in a serious activity of modern life, and the aspect of liberal culture. It would profit us little to enter now into a theoretic consideration of the exact relation of these aspects to vocational, social, and culture aims, or to the ideals of usefulness and of happiness. Those aims must dominate, those ideals must permeate, the work of a school which consciously endeavors to give effect to these two aspects of secondary education. The teachers in such a school will feel constantly the pressure of a double duty, that of preparing their pupils to do something well and to enter intelligently and helpfully into the life of their day. There is no hint here of the old ideal of cultured leisure, the *diagoge*

of the Greeks. A modern school prepares its pupils for active, modern life. But it does not disregard the ideal of general culture.

What, then, is general culture? It is the capacity to understand, appreciate, and react upon the resources and problems of modern civilization.⁸ If anyone will have it that general culture is something else or something more than this, from him we must part company. We have made our confession of faith. The development of this capacity is the foundation aspect of secondary education as the vocational schools endeavor to supply it. With the other aspect, the mastery aspect, it completes secondary education as we believe the colleges should recognize it. If any school will put these two aspects of secondary education into effect, we claim for its graduates the right to go forward into the field of higher education without let or hindrance.

HOW THE AIMS OF SECONDARY EDUCATION SHALL BE REALIZED

To compass the application of these principles, what must the secondary school attempt? It must attempt three things. *First*, it must lay the foundations of general culture by giving to the pupil a thorough acquaintance with (a) the kinds of data, (b) the mental processes involved, (c) the ideals presented, and (d) the applications possible in *all the distinct main branches* of modern knowledge. In this provision we are contending for the foundation aspect of secondary education. We may as well at once confess, as later it will become apparent, that we do not hold any specific subject—unless the Mother Tongue be such—as essential to liberal culture. If any substantial scientific subject, for instance, is properly taught, it will give to the pupil the necessary acquaintance with the kind of data, the mental processes, the ideals and the applications involved in scientific study. Nor will our list of specific subjects include a subject, such as common geography, which comes properly within the field of elementary education; nor one, such as comparative philology, which is beyond the grasp of high school pupils. But, *second*, it must not waste the pupils' time in work which is not carried far enough to yield the acquaintance we have postulated as desirable; nor must it carry special work so far as to exclude acquaintance with any "great branch." Yet, *third*, it must offer to each pupil the opportunity to carry to a reasonable point of mastery

⁸ Hannus, *op. cit.*, p. 26.

that special branch in which lie his dominant interests and powers. It can be seen that in thus giving effect to the two aspects of secondary education, that of foundation and that of mastery, the secondary school is fulfilling our conception of its particular function. Vocational, social, and culture aims are subserved; usefulness and happiness may be founded upon a training thus planned. No essential purpose of education, in other words, is ignored. We are willing, therefore, to present these principles as our educational *Institutio*. Upon it we profess to base our educational conduct. If our courses of study are the just application of our philosophy, the colleges must accept our graduates, or confound us in our heresies.

EFFECT OF COLLEGE REQUIREMENTS ON THE CHOICE OF HIGH SCHOOL SUBJECTS

But the effect of any philosophy may be perverted by practical misjudgments as to means. It is in the influence of college requirements upon the actual choice of secondary subjects that we find our grievance. How should our doctrines be applied; what actual application do we ask the colleges to meet? If the college authorities hold the formal discipline theory, their requirements would of course not fit our training. For it is hard to see how an acquaintance with all the main branches of knowledge can be gained from a study of a single, specific subject or groups of subjects, or how the dominant interests and powers of every pupil can be turned to account in a system which recognizes no mastery but mastery in the classics or in mathematics. It is like trying to get the varied virtue of a seven-course dinner by eating a great deal of the fillet of beef. But we must part company with the formal disciplinarians without further argument. We cannot accept their dogma as a basis for a rational system of secondary instruction. What virtue we find in it we shall be glad to acknowledge, but we hope that its advocates grow ever fewer and fewer.

Other college influences upon the choice of secondary studies we must hold to be equally fatal, if based upon a less pernicious doctrine. There are sins of omission as well as sins of commission. College authorities may frame their requirements without regard to three principles which may be easily deduced from our theory of secondary training. *First*, they may not require examinations in every branch

essential to the foundation aspect of culture. *Second*, they may not offer advanced examinations in subjects in which many pupils may reasonably specialize. *Third*, they may attach such importance to the examinations in a single subject as to make it stand, improperly, on a level with the main branches of knowledge.

EIGHT DIVISIONS OF SECONDARY SCHOOL SUBJECTS

These main branches of knowledge are, in our opinion, to be classified as follows: *first*, ENGLISH, including both composition and literature; *second*, FOREIGN LANGUAGES, both ancient and modern; *third*, NATURAL SCIENCE; *fourth*, POLITICAL and SOCIAL SCIENCE, including civics, descriptive economics, and commercial subjects; *fifth*, MATHEMATICS; *sixth*, HISTORY; *seventh*, ART; *eighth*, MANUAL TRAINING, including mechanical drawing and shop-work. By means of instruction in these branches we would give effect to our dual ideal of secondary education. They form the field of secondary education as we would at present bound it.

In the light of our dual ideal it can be seen that any particular subject included under one of these branches can be used to effect either of two purposes. It can be taught as a means to general culture, or it can be taught as offering a reasonable field for the activity of a pupil's dominant powers. According to the view of any particular subject adopted by the college, an examination in that subject should either be offered, or required. But we must here repeat that we hold general culture to be embodied not in knowledge of specific subjects, but in an acquaintance with the characteristics of each of the great departments of knowledge. The only specific subject, therefore, which we would willingly require in college entrance examinations or demand of all secondary schools is English. The reasons for this exception are obvious. Another possible exception may be made in favor of Algebra and Plane Geometry. If these specific subjects are required, it must be upon the ground that in them, and in them only, the essential character of pure mathematics can be displayed to beginners. But we would require, not an examination in physics, but the presentation of a certain amount of science. In Foreign Languages we would require a definite amount of Latin or Greek or French or German or Spanish. The equivalence between the amount prescribed in Latin and that prescribed in

German is not here at issue. The principle for which we contend is that of choice. Language, not Latin, should be required. We commit ourselves, therefore, to this opinion: The influence of college requirements is against liberal culture when a test in a specific subject is required in place of an option designed to test the familiarity of the candidate with the elements of a general department of knowledge. It follows that we cannot condemn any secondary school as illiberal on the ground that it does not present this or that specific subject.

Certain qualifying views may now be presented. We would add to our list Physical Training, and would grant to its advocates the possibility that in time the colleges may find it necessary to subject every candidate to a physical examination. We should be glad to see more rational and more searching requirements in this subject adopted in all secondary schools. We should not now advocate, on the other hand, any requirement in Manual Training nor in Art. The elements of these branches should be presented in the primary and grammar schools. High-school instruction in them we are now inclined to place in the category of special instruction, in which any pupil may reasonably choose to exercise his dominant powers; as subjects to be offered under the mastery aspect of secondary education they may therefore be pursued as far as the pupil can go consistently with his acquirement of liberal culture. The college should consequently offer, but not require, examinations in reasonably advanced forms of Manual Training and of Art. This leads us without further discussion to the proposition that the college should offer (not require) advanced examinations in any specific subjects which may reasonably be taught under the mastery aspect of secondary education.

TEST OF EDUCATIONAL VALUES

We have now attempted to present certain principles upon which the college should determine what subjects to require and what to offer. These we have based upon our theory of secondary education. The question of the relative weight to be given to various subjects remains to be treated. In this matter we have a partial concession to make to the formal disciplinarians. The relative educational value of different subjects may be determined upon

four grounds. *First*, a subject may have value because its data can be put to practical use. This sort of value attaches to the multiplication table, and to the data of many vocational subjects. Considered apart from other values it is not of the greatest educational importance. But it is to be noted that it does not vitiate other values; indeed, when combined with them it should add weight to the subject. *Second*, a subject may have value for the ideals it presents. If the pursuit of such subjects as literature and history inculcate sound ethical and aesthetic judgments, strengthen high moral incentives, and exercise the power of moral insight, those subjects are of supreme importance. This sort of value should therefore be taken into account in determining the weight of specific examinations. But this sort of value is hard to convey and harder to test in examination. *Third*, a subject may have conventional value. As we do not wish to be made conspicuous by peculiarities of dress, so we do not wish to be conspicuous because we do not know when Shakespeare lived or who discovered the laws of motion. This sort of value should neither be ignored nor overestimated. *Fourth*, a subject may be of value because it exercises vigorously all the powers its data call into play. This may be called the work-value of a subject. Latin, for instance, exercises the powers called forth by linguistic data to a greater extent than does French. Algebra calls for greater exercise of the power to handle abstract values than does Arithmetic. Chemistry exercises certain powers of observation; History, certain powers of generalization. So much let us grant to the formal disciplinarians; so much, but not more. We see only what we are trained to see. The powers of observation trained in Chemistry will not help us to observe stock-quotations, nor to notice delicate shades in human character. Power to deal with Latin roots will not help us to decide the artistic significance of Mr. Whistler's portrait of Carlyle, nor to frame a judgment upon the taking of rebates. Latin, therefore, may be given greater weight upon this count than French, but cannot be thus compared with Drawing or with Economics. All four of these values should therefore be taken into consideration in determining the weight to be attached to a given subject. But as between different groups of subjects—as between History, let us say, and Mathematics—it is obvious that the fourth sort of value will play a smaller part in

determining relative weights. For History and Mathematics exercise the intellectual powers in very different ways. A great deal of Mathematics, or a little very hard Mathematics will not increase in the pupil the power to deal with historical data nor strengthen in him ethical judgments. The second sort of value must here come into strong play. The scope, kind, strength, and permanence of the *incentives* to activity, and the kind, degree, and permanence of the *power* to think and to execute have been stated by Professor Hanus as the factors in this sort of a problem in values.⁴ We fear that in some college decisions these factors have had no effect; the product seems to be the result of multiplying x of work-value by x cube of conventional value.

FAIR REQUIREMENT FOR ENTRANCE TO COLLEGE

What now is the specific outcome of these general principles? It can be presented under two heads. *First*, to hold the secondary school to its duty of supplying a foundation for liberal culture, we would have the college require each candidate to present (1) English, (2) a Foreign Language, ancient or modern, (3) a prescribed amount of Natural Science, (4) a prescribed amount of Political Science, (5) Algebra and Plane Geometry, (6) a prescribed amount of History. It will be noticed that we have prescribed no specific subjects except English and Elementary Mathematics. In the latter case we give the subject the benefit of a doubt which we are frank to confess. But we feel that it cannot then be maintained that a candidate who can satisfy his examiners on the points we have specified has missed the foundations of general culture. How much language, it may be asked, do you advocate? Upon so specific an application all that can be presented is a personal judgment. Under the general principle that enough should be required to assure to the pupil at least the full work-value of every subject, by which we may be certain that he knows the character of the data involved, we should stipulate for Latin, through Caesar; for Greek, through Xenophon; for a modern language, both the elementary and the intermediate examinations, if not the advanced. In Natural Science, we should stipulate Elementary Physics, or

⁴ *Educational Aims and Educational Values*, by P. H. Hanus, Macmillan Co.: 1900, pp. 7.

Elementary Chemistry, or two other elementary sciences. Under this head it may further be noted that the college is called upon to offer examinations of elementary grade in every subject which can properly be studied in a secondary school. In the Political Science field, for instance, there should be a minimum requirement, and additional aspects of the subject as optional. We cannot here review the arguments for these subjects (they are ably presented by President Edmund J. James in the annals of the American Academy of Political and Social Sciences for November, 1897); but it must be clear that a youth unacquainted with the nature of economic data has missed modern culture. Until the instruction in this field has been more clearly formulated it would be difficult for one not an economist to be more definite; but even to the laymen it is obvious that something should be done. The college requirements should cover every specific subject in which a student may properly present himself in satisfaction of the general requirement of liberal culture. *Second*, the college should offer an advanced examination in every subject in which the student may reasonably specialize in the six fields enumerated above and in the two additional fields of Manual Training and of Art. Reasonable specialization has been defined as specialization which does not interfere with the acquirement of general culture. Essentially, this is a question for the individual. The college must strike a fair balance. It seems to us that the traditional requirement in Vergil is all that can be compassed by way of proper specialization in Latin. In modern languages, the usual advanced examination, made somewhat more severe, is all that can be asked. In Natural Science, we should expect to find advanced Physics. Advanced Chemistry seems to be somewhat beyond the possibilities of most secondary schools. Considerations of expediency are not, of course, within the scope of an argument of this kind; we can demand of neither school nor college what it would gladly do, but for lack of means cannot.

NATURE OF COLLEGE ENTRANCE EXAMINATIONS

There is now one further consideration. Of what *kind* shall college examinations be? It has been laid down by the Committee of Ten that "every subject which is taught at all in a secondary school should be taught in the same way and to the same extent to

every pupil so long as he pursues it, no matter what the probable destination of the pupil may be, or at what point his education is to cease." President Eliot has defended this proposition⁵ so ably that one is with difficulty forced to admit that he disagrees with the affirmation of a body so authoritative with an advocate so distinguished. A solution of the difficulty may yet be found. At present, however, the point at issue may be illustrated as follows: We wish to give to the students in our commercial high schools a practical knowledge, let us say, of German. We wish to train them to speak the language. In so doing, we do not intend to ignore German literature; we wish, indeed, to have them read as much German literature as we have time for, provided such reading does not prevent us from teaching our pupils to *talk everyday German*. We cannot afford to send them out with a vocabulary composed mainly of poetic forms. It follows, of course, that we cannot teach only Heine, Schiller, and Goethe. But if the colleges insist upon the literary aspect of the language, our pupils are placed at a disadvantage. Very likely they could pass the examination, after a fashion. But that is not the point. The Latin School pupils, without half our allowance for German, could pass it more easily. Is our German not as valuable as theirs? Does it not give our pupils all the virtue of German as a language? We have seen the matter through green glasses; they have seen it through blue. It is so throughout the list. We have taught Physics with an eye to its commercial applications; not superficially, we trust, but as those who would prepare for life by participating in it. What, then, is to be done? As special pleaders, we must advocate a form of examination which tests with exactness the candidate's grasp of the principles involved in the subject, but which does not require him to have a special knowledge of purely academic applications of it. Let us hasten to deny that we wish to avoid getting the full *educational* value out of every subject: we want its work value and its value as conveyor of ideals; but as between a practical value and a conventional value we ask to be given credit for choosing the former.

⁵ *Educational Review*, xxx, 4, Nov. 1905, p. 325.

EFFECT OF COLLEGE REQUIREMENTS ON HIGH SCHOOL TEACHING

We have now tried to make a broad application of our philosophy of secondary education and to indicate the way in which we believe the colleges should meet us. Let it not be supposed that we think the problems of secondary education settled, or capable of being settled. It may be that experience will prove that Manual Training is an indispensable element of general culture or that Algebra is not essential. Experience must be our final court of appeal. But we hold that the college which still insists upon Latin, Greek, and Mathematics as the *sine quâ non* of admission is not helping the secondary school to work out its salvation and may possibly be blind to its own. For the college cannot afford to wait until instruction in secondary economics (for instance) is efficient before it puts that subject upon its list of elective examinations. If it will put the subject on the list and set a searching examination in it, good instruction will be forthcoming, and with good instruction the value of the subject as an educational agent is immediately increased. If a college will not train teachers, it may at least create a demand for good teaching.

PRESENT PRACTICE IN COLLEGE ADMISSION

In spite of the fact that we do not profess a well-defined opinion upon every specific problem within the range of this discussion, it will be interesting to note how the present, actual state of college requirements squares with the principles in which we have confessed our belief. The writer has made a study of the entrance requirements of twenty colleges, the results of which he here with some diffidence presents. The colleges selected represent every section of the country except the South; they include all the great universities of the East and West, a number of state universities and several so-called small colleges. Anyone who is at all familiar with college catalogues must surmise that the data gathered form something of a labyrinth. We shall try to make our conclusions clear and we trust we have avoided large inaccuracies. Let it be said by way of explanation that the requirements of these twenty colleges for all general courses have been tabulated, whether those requirements were for general admission, or for a general degree, such as the

A.B., B.S., Lit.B., or Ph.B. Requirements for special courses, such as the courses for engineers, or for teachers, were not tabulated. Requirements for courses in commerce were found to correspond very nearly to requirements for the B.S. degree, but divergences were noted. For the sake of clearness and brevity, however, a single, general tendency with regard to each subject is all that is here presented. This may in every case be taken to represent the most liberal policy with regard to the subject in question. In one university, for instance, advanced Latin is required for admission to the course in Arts, but is alternative with a modern language plus solid Geometry and Trigonometry for the course in Science and for the course in Business. In this case we have counted the university among the number which do not specifically require advanced Latin. For the points in which we are now interested are these: first, to what extent is the subject offered for admission to general courses; second, is there a tendency to require it for admission, either specifically or with an option? We are not for the moment interested so much in the possibility of graduating our pupils into a particular college or into a particular course, as we are in the general effect of college entrance requirements upon the several subjects offered in secondary schools.

It should require but a glance at the figures in the accompanying tables to prove that the ideals for which we have been contending are not universally held by college authorities. The tendency, we are glad to note, seems to be away from hard and fast requirements towards options within a single field. This is a step towards the attainment of the ideal of general culture in secondary schools. But in so far as that ideal depends upon a *wide* offering of elementary subjects, the figures for Manual Training, for Music, for minor scientific subjects and for economic subjects may be instanced as dubious. And the mastery aspect of secondary education receives none too vigorous encouragement: witness, the figures for advanced Physics and for advanced History. The only form of mastery universally recognized is that of mastery (secondary school mastery) in the classics.

The tables presented on pages 37 to 39 show in compact form the present practices in admitting students to college.

TOTAL NUMBER OF COLLEGES—20

| Subject | Number of Colleges in Which the Subject Was Specifically Required | Number of Colleges in Which the Subject Was on the Free Elective List | Number of Colleges not Offering any Examination in the Subject | Number of Colleges in Which the Subject Was One of a Group in Which an Option Was Offered. Remarks |
|---|---|---|--|---|
| ENGLISH | 20 | .. | .. | Two colleges require composition and offer Literature. One offers Advanced Literature |
| LANGUAGES Ancient Latin Elementary | 8 | 4 | .. | Eight colleges offer an option in Languages, with a tendency to give Elementary Latin no more weight than Elementary French |
| Latin Advanced | 6 | 5 | .. | Nine colleges make Advanced Latin optional. It is rated higher than Advanced Greek but no higher than Advanced German |
| Greek Elementary | 3 | 6 | .. | Eleven colleges make Elementary Greek optional, usually with Latin, or with an equivalent combination chosen from Latin, French, and German |
| Greek Advanced | 2 | 7 | .. | Eleven |
| Modern German Elementary | 2 | 4 | .. | Fourteen. The option is usually wide, but is in at least three cases limited to choice between German and an ancient language |
| German Advanced | .. | 7 | 2 | Eleven |
| French Elementary | 2 | 4 | .. | Fourteen |
| French Advanced | .. | 7 | 2 | Eleven |
| Spanish Elementary | .. | 3 | 16 | One |
| Spanish Advanced | .. | 1 | 19 | |
| NATURAL SCIENCE Physics Elementary | 5 | 4 | 2 | Nine colleges offer an option between Physics and Chemistry or between Physics or an equivalent amount from other scientific subjects |
| Physics Advanced | .. | 2 | 18 | |

TABLE—Continued

| Subject | Number of Colleges in Which the Subject Was Specifically Required | Number of Colleges in Which the Subject Was on the Free Elective List | Number of Colleges not Offering any Examination in the Subject | Number of Colleges in Which the Subject Was One of a Group in Which an Option Was Offered. Remarks |
|--------------------------------------|---|---|--|--|
| Chemistry Elementary | 1 | 7 | 3 | <i>Nine.</i> The tendency is to rank Physics and Chemistry as equivalent, and Botany, Zoölogy, Physiography, etc., as each worth half the value of Physics |
| Biology | .. | 3 | 12 | <i>Five.</i> Some colleges offer Biology; some separate examinations in Botany and Zoölogy; some both |
| Botany | .. | 6 | 8 | <i>Six</i> |
| Zoölogy | .. | 6 | 9 | <i>Five</i> |
| Geology | .. | 2 | 17 | <i>One</i> |
| Astronomy | .. | 4 | 15 | <i>One</i> |
| Meteorology | .. | 1 | 19 | |
| Physiography | .. | 7 | 7 | <i>Six</i> |
| Physiology, Anatomy and Hygiene | .. | 3 | 13 | <i>Four</i> |
| Psychology | .. | 1 | 19 | |
| POLITICAL SCIENCE Civics | .. | 4 | 13 | <i>Three.</i> Civil Government of the United States is often included with the requirements in U. S. History |
| Economics | .. | 3 | 16 | <i>One.</i> Political Science is here made optional with History or Manual Training |
| MATHEMATICS Algebra Elementary | 18 | 1 | .. | <i>One.</i> With other Mathematics |
| Algebra Advanced | 1 | 4 | 8 | <i>Seven.</i> With other Mathematics |
| Geometry Plane | 18 | 1 | .. | <i>One.</i> With other Mathematics |
| Geometry Solid | 9 | 6 | .. | <i>Five.</i> With other Mathematics |
| Trigonometry | 1 | 6 | 6 | <i>Seven.</i> With other Mathematics |

TABLE—Continued

| Subject | Number of Colleges in Which the Subject Was Specifically Required | Number of Colleges in Which the Subject Was on the Free Elective List | Number of Colleges not Offering any Examination in the Subject | Number of Colleges in Which the Subject was One of a Group in Which an Option Was Offered. Remarks |
|-----------------------|---|---|--|---|
| Analytical Geometry | .. | .. | 19 | <i>One.</i> Made part of a heavy substitute for Greek, elementary and advanced |
| HISTORY Elementary | 16 | 4 | .. | Either Greek, Roman, English, American, Mediaeval and Modern European, or a combination |
| Advanced | .. | 9 | 10 | <i>One.</i> Advanced History seems usually to mean merely <i>more</i> history |
| MANUAL TRAINING | .. | 3 | 16 | <i>One.</i> With History and Political Economy. Includes various specific subjects as wood-working and black-smithing |
| ART Drawing | .. | 7 | 13 | Freehand and Mechanical |
| Music Elementary | .. | 2 | 18 | Harmony |
| Music Advanced | .. | 1 | 19 | Counterpoint |

EVILS OF THE PRESENT PRACTICE

Have we here found the reason for two real evils in our secondary education? Let us state them for your corroboration from your own experience, and with the statement leave our argument in your hands. We hold the college requirements responsible, namely, for the presence in Latin schools of pupils who never should be in them, who are not fitted for that special form of secondary training. And we hold the college requirements responsible also for the converse condition,—the social stigma (mild if you like, but real) upon the boys in the Manual Training and Commercial High Schools. The harm in one case is educational; in the other, social. But it is done, and will be done, until that happy time when no one who will and who can take it shall be prevented from proving his fitness for higher education.

III

VOCATIONAL STUDIES FOR COLLEGE ENTRANCE REQUIREMENTS

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TIMELINESS OF THIS DISCUSSION

The present is certainly a most opportune time for this discussion. A few years ago the general scheme of college entrance requirements seemed pretty well defined. Today we are awakening to our ignorance and are open to suggestions from all quarters. The growing recognition of music as a proper subject for entrance examinations is evidence in point. It may be that in this particular case the recognition was not wholly wise; that the cause of American music has far less to gain thereby than its friends have hoped; that preparatory music is likely to be to an even greater extent a fiasco than preparatory English has been. But it is enough for us to note that the recognition has been asked and given, and that collegiate authorities have in so far expressed their willingness to accept, for matriculation, subjects that are far removed from the lines of the traditional requirements. We may, therefore, attack the various questions connected with our subject without feeling that they have been answered for us in advance.

AN APPARENT INCONSISTENCY—ITS SOURCES

We note, at the outset, a certain apparent inconsistency in the demands of those who are urging the recognition of these new subjects. On the one hand, they are unreserved in declaring that the secondary school should not be degraded into a mere preparatory school; that it has a work of its own well worth doing for its own sake, without regard to the small percentage of students who afterwards go to college; that every stage of the educational process should be directed with a view to the present actual development of the pupil, and not with a constant squint at the supposed require-

ments of a future stage. Such phrases as "preparatory English" and "preparatory mathematics" are therefore resented. The work of the high school is felt to be no more preparatory to that of the college, than the work of the college is to that of the professional school. On the other hand, while thus asserting the independence of the secondary school, they are just as outspoken in the conviction that the colleges ought to accept the newer school-studies for a generous part of their entrance requirements—that is to say, that these studies also ought to be made "preparatory" subjects and thus be placed beneath the patronage and somewhat dictatory control of the collegiate authorities.

This apparent contradiction seems to have a twofold origin, partly in matter-of-fact and partly in educational theory. The fact of the matter is that the secondary school is in certain important respects essentially a preparatory school. The abrupt discontinuity of its work with that of the lower grades, and the intimate connection with that of the college freshman and sophomore years, are ample historical evidence of this. The high school has gotten its curriculum from above, not from below—and not only its curriculum but its ideals, its measures of value, its standards of accuracy and effectiveness. However small the proportion of boys who go to college, it is what is expected from these few that tends to set the mark for the rest; and wherever this work is departed from, it is almost invariably by a descent. Furthermore, the recent great improvement in secondary education throughout the country has been largely due to demands from above. The colleges were bravely struggling to rise, and because they could not rise alone they had to persuade the middle schools to follow them in the ascent.

I. HIGH SCHOOLS AS PREPARATORY SCHOOLS

For these reasons and in these respects, our high schools are essentially preparatory schools. To be sure, their growth would have been impossible without local support, and this support would not have been given if the people of the towns and villages had not felt the need of something more than an elementary education for their children. The extraordinary development of the high school system of California, with a minimum of state encouragement and without a particle of state financial aid, well illustrates this feeling.

In a village of fifteen hundred inhabitants, with, say, a thousand more within a circle of five miles radius, I have there seen a high school of one hundred twenty-five pupils—one in twenty of the total population; meaning that almost every boy and girl of proper age was in the school. It was not a rich community, and the high school tax was a fearful burden. The salaries of the four teachers ranged from one hundred twenty-five to seventy-five dollars per month. Surely that school was entitled to a large measure of self-respect and self-dependence. But an examination of its curriculum showed that it was entirely modeled upon the entrance requirements of the University of California; and the proud boast of the school was that it had been fully accredited by the university examiners. Situated as it was in the southernmost county of the state, this school had a course of study that was as nearly as possible like those of the San Francisco and Oakland high schools. No single study had any marked relation to the peculiar needs arising in such an environment. Thus, although the school was supported by an earnest public sentiment, its whole character was fixed, the direction of all its endeavors was determined, by extraneous influences. For very few of its graduates could ever hope to go to college.

The instance which I have cited is simply an extreme type, to which hundreds of others are no doubt closely parallel. It may serve to exemplify the fact that the American high school, as at present generally constituted, stands for nothing except an aspiration; that its curriculum is not an organic whole, but a conglomerate of what the colleges have found it possible or convenient to pass down to it; that it represents no actual social need; and that the public which supports it must, therefore, to a considerable extent, judge of its efficiency simply by its success in preparing students for college.

This is not the place to take account of the various more or less successful efforts which are being made to remedy this condition of affairs. Our present concern is with the facts as they are, and with the sort of public sentiment that they have occasioned. It is, I think, not difficult to see why collegiate recognition of a high school subject is felt to be so overwhelmingly important. It confers a badge of respectability, a title to public consideration and support.

EXCEPTIONAL POSITION OF THE VOCATIONAL STUDIES

It must, however, have occurred to the reader, that what we have been saying cannot pass without exceptions—notably music and the vocational studies. Of these it is conspicuously true, that they *do* stand in a very immediate relation to actual social needs, and that the public has a very swift and tolerably sure means of estimating the skill with which they are taught. Logically speaking, therefore, these studies have not the same need of collegiate recognition as most of the others. But sentiment does not always run in logical channels. When the sentiment has once been established, that the study which leads to college is more estimable than the one which does not, both teachers and students in the latter line must suffer from the general impression that the work they are doing is either nonessential or even of distinctly inferior grade. Needless to say, however, thoroughly good work in subjects which have an immediate and visible relation to social welfare cannot long remain without public recognition of their importance. In spite, therefore, of all possible prejudice against them, the vocational studies are not in any desperate need of the honor of being accepted for college entrance credits—though it is easy to see why the honor should be desired for them.

II. CLAIM OF THE HIGH SCHOOLS TO INDEPENDENCE

I undertook to give two reasons for the seemingly contradictory demands of the advocates of these vocational studies; on the one hand that secondary instruction be organized primarily for its own ends and not as a mere preparatory course; and on the other hand that the colleges accept the work thus organized as adequate preparation for their own work. A few of the facts bearing on the matter have now been briefly noted, and it remains to take account of the part which has been played by certain current educational theories. And here one is tempted to smile at the swift irony of fate, which has turned one of the firmest dogmas of recent conservatism into a war-cry of the new liberalism. A dozen years ago the conviction prevailed that the best preparatory course constituted at the same time the best possible secondary education for those who could go no farther; and school administrators were advised to use

this as a principle of economy—for which purpose, indeed, it was admirably suited. But today the maxim is simply converted, so as to read: The best secondary education, considered in itself, is likewise the best preparation for any further education that may chance to follow it.

From the point of view of formal logic, the meaning of the proposition is unchanged; but its implications are none the less radically transformed. For, in the first place, it is implied, that the practical experience of the school man is to be given precedence in its own domain, over the college man's theories as to what he has a right to expect from youth. This means the conferring of a dignity and responsibility upon the high school teacher that makes his office as worthy as any in the whole realm of education. And, in the second place, the converted proposition implies that the judgment of the experienced school man shall be accepted at its face value by the colleges, the only check put upon that judgment being the actual collegiate record of the students received from the schoolmaster's hands.

If the new maxim is still a lie, it is, at any rate, a truer lie than the old one. It ought to be true. Give the high schools freedom from politics and a relatively permanent and truly professional personnel, and there is no reason why it should not be true. From this point of view, the apparent contradiction which we have previously noted is easily explained. That the school men should demand at once independence and recognition is not intrinsically absurd.

VOCATIONAL STUDIES NOT EXCLUDED BY COLLEGE PREPARATION

But both the old maxim and the new are open to very obvious criticism upon other grounds. For secondary education, or even the best secondary education, is not an unambiguous term. The college has its own definite work to do, and that work presumably requires a certain amount of more or less definite preparation. On the one hand, the college is not the only institution for which the secondary school may prepare. It may prepare for the farm, the shop, the draughting-room, the office, or for various technical schools of higher grade; and the definite prerequisites for these various spheres of work are by no means identical. The assertion, then, that the best secondary education is at the same time the best

preparation for college, requires for its validity the proviso that the prerequisites for college work have not been slighted.

A candid examination of the premises, however, shows that this objection has not all the pertinence that might be supposed. Let us take the entrance requirements of the Literary Department of the University of Michigan as an example. The first feature that strikes our attention is the slenderness of these requirements. They amount to only fifteen units—that is to say, three recitations a day throughout the four years of the high school course; while good high schools commonly require four recitations a day, and, under conditions of overpressure, this number is frequently raised to five. The high school can thus easily accomplish far more than is required; and the superfluous energy may be devoted either to enabling their graduates to enter college with advance credit, or to giving them a more diversified secondary education. At the same time, the weaker schools find it a sufficient task to cover the allotted ground. After the meagerness of the requirements, we are, in the second place, struck by their indefiniteness. Only seven units (English, algebra and geometry, and physics) are definitely prescribed. Two years' study of a language (which must not be Greek) are also required. The remaining six units are freely elective from a considerable range of topics—history, ancient and modern languages, and various natural sciences. Thus the student may enter college without any history, or without a working knowledge of any language, or without any natural science other than physics. Furthermore, of the subjects actually prescribed, it is to be noted, that some forty per cent of the matriculants make no further use of more than a petty fraction of the mathematics they have acquired, that the same is true of physics, and that the preparatory English is so confessedly a failure that the one required course in the college is elementary rhetoric.

Like most unpolished facts these cut in various directions. On the one hand, they further minimize the necessity of giving entrance credits for work in vocational subjects. The well organized high school can easily, if its administrators so desire, devote four or five periods a week to such studies throughout the entire course, and still contrive to meet the college entrance requirements. Even a distinctly commercial or industrial school is likely to turn out men

who with a summer's coaching, can make up the necessary number of credits for matriculation. On the other hand, if the proposed innovation is thus seen not to be imperatively called for, the burden of proof is somewhat lightened for those who would prove it to be feasible. For all that they need to show is that the studies in question possess such culture value as to warrant their displacing other elective subjects (Greek, history, or biology, for example) in the early stages of a liberal education. Putting the two conclusions together, we may say that the proposed measure is not one of relief for the high schools, but of strictly collegiate policy, the sole question arising for discussion being whether it is in the interest of the college thus to encourage that sort of training in its matriculants.

Even this question is sufficiently complicated. We might be tempted to throw it aside with the remark, that no doubt different institutions, subject to different conditions, would probably have to settle it differently. That is no doubt true, as it is always true of questions of policy. There are, however, some general principles involved, which seem to me worthy of a brief consideration in this place.

RECOGNIZED VALUE OF THE VOCATIONAL STUDIES

The old antithesis of "liberal" and "vocational" is one that can no longer be maintained by students of education. It had its origin in a false—that is to say, impermanent—conception of the relation between work and leisure, which rested, in turn, upon an equally false conception of the essential distinctions between classes of men. It was Aristotle—the same observer who held that some men were born to be masters, and some to be slaves—that first gave clear expression to the sentiment, that, though leisure and business are both necessary, the former is altogether the more worthy both in itself and as an educational aim. Time, which is so much wiser than any single observer, has shown that the ennoblement of leisure is impossible without an equal ennoblement of business—that any attempt at the former apart from the latter is bound to issue either in a wretched dilettanteism or an almost equally contemptible "polite learning." The education that trains for work may be as truly liberal—i. e., tending to make a man free in body and soul—as an education which provides for the decent employment of leisure; and it can

descend to no depths of illiberality beyond those to which the latter has often sunk.

THEIR CHARACTERISTIC DEFECT

In discussing, therefore, the advisability of allowing matriculation credits for work in vocational studies, we may, I think, take it for granted that such studies are capable of affording a very high degree of culture. This need not blind us to the fact that they are liable to characteristic weaknesses. A useful end does not make a study illiberal, but a sentiment, that nothing is to be learned which does not have a direct bearing upon the end in view, most decidedly does; and such a sentiment is apt to be roused in young minds by an exclusive emphasis upon the specific practical applications of knowledge. Technology is every whit as worthy an object of study as science; but a course in any branch of technology, which does not presuppose a thorough grounding in the subsidiary pure sciences is likely to be a sorry sham. That is why, for example, textbooks in pedagogical psychology are so wretchedly poor, whenever they do not take for granted a previous schooling in general psychology. The same is true of the relation of instrumental drawing to geometry, and of agriculture to chemistry, botany, and entomology. If educational experience has proved anything, it has proved this,—that if science is to be studied to any real advantage, it must be studied first of all for its own sake—or *as if* for its own sake; that is to say, impartially, with breadth of view, and with an eye not simply to “practical” details but to the general principles which comprehend and explain the details. To attempt to plunder a science of just what is needed for a particular purpose, is to doom oneself to failure. Again, in the conduct of the technical instruction itself, it is important, both from the educational and the practical point of view, that the main emphasis be placed, not upon the convenient empirical formulae that can be applied without much critical thought, to the more common emergencies of every-day experience, but upon the reasons for the formulae. That is why in the training of teachers—to speak of the profession that is best known to most of us—the pedagogy of methods and devices has had to be supplemented, or even to be replaced, by the history and theory of education. That by following an opposite course, technical education

sacrifices its own highest ends is, I say, unquestionable; but it is its besetting sin. If, therefore, entrance credits were allowed in vocational subjects, the college might well observe with especial care the spirit in which the instruction was carried on—whether mere skill was aimed at or something more.

RELATION OF THE COLLEGE TO VOCATIONAL STUDY

There is this further consideration that may in many cases militate against the advisability of the proposed measure. The college itself gives no direct preparation for any vocation, except, somewhat anomalously, for that of the teacher and that of the consulting chemist. It does, however, aim at providing a general training in the sciences and humanities, such as will serve as a basis for the future acquirement of the arts both of business and of leisure. In other words, the college stands for a lengthened adolescence, the ultimate object of which is to ensure a more fully ripened manhood. As such, it presents a marked contrast to the various technical schools of the university, which introduce their students to vocational studies as promptly as possible after receiving them from the preparatory schools. Now the commercial and industrial high schools stand for an exactly opposite principle—the need of fitting vast numbers of boys and girls for the business of life, with all convenient speed. A lengthened youth is a luxury which all cannot afford; and even the technical school of college grade is beyond the reach of the great majority. These high schools have thus a work to do which yields to no other in social importance; but it is a work that is designed not as preparatory, but as supplementary, to the work of the college. The boy who enters a commercial high school, for example, does not do so with the intention of afterwards going to college; but he enters it just because he lacks either the means or the ambition of going to college, and wishes to be fitted for a position as promptly as possible. To be sure, he may afterwards change his mind, and determine to go to college at any cost. But in that case the few slight obstacles in his path will not seriously deter him.

It must not be forgotten, that the first two years of the college course are, as a usual thing, more closely connected with the classical, literary, or scientific course of the high school than with the last two years of the college course itself. This is tacitly recognized

in some colleges, by the very different requirements imposed upon students during the first two and during the last two years; it is openly proclaimed in others; and even where it is formally denied, the changing character of the instruction attests the fact. If we mean by a secondary education *such an introduction to the general elements of the various branches of modern culture as is necessary to prepare the student for intelligent specialization*, then our high schools and academies certainly do not cover the ground. That used to be the task of the college, but it now accomplishes something more than this. Before the student completes his undergraduate course, he is able, under proper guidance, to do a certain amount of really intensive work. But that is not during the first two years. These years really belong to secondary education; and if either the problem of the requirements for the bachelor's degree, or the problem of college entrance requirements is to be intelligently solved, they must be treated together, and treated with a full consciousness both of the twofold character of college work and of the relative continuity of the high school period and the freshman and sophomore years. Thus the proposal to accept work in vocational lines for college entrance is closely parallel to a proposition to permit college freshmen and sophomores to elect a certain amount of work in affiliated technical schools. This, too, is by no means an inherently ridiculous proposition, but it is worth noting that the drift of university sentiment is against it. Thus, for example, in the various "compound" courses that have recently been organized, entitling the graduate to two degrees—the literary-law, for instance—the technical work is not usually begun until after two years of strictly academic work. So, also, the departments of pedagogy do not usually receive pupils before the junior year. The same motives would presumably apply with even greater force to the requirements for the preparatory course.

RELATION OF THE PRESENT PROBLEM TO THAT OF THE BACCALAUREATE DEGREE

I said just above that the college entrance problem was really inseparable from that of the baccalaureate degree. With this principle in mind, let us refer once more to the University of Michigan entrance requirements. Attention has already been called to their very limited

significance, and the fact was used as an argument for the recognition of vocational subjects—if so little is essential, why not let these subjects, as well as any others, go to make up the meaningless total? It is quite possible, however, that some doubt may have been raised in the reader's mind, as to the wisdom of these requirements; and I dare say that if they represented a permanent condition of affairs very serious criticism would have to be passed upon them. But nothing is more obvious than that they represent a transition in the relations between school and college, a provisional compromise between various interests whose proper equilibrium has not yet been reached. For these entrance requirements must be understood in connection with the system of free election which has been established in the college; they had to be made as indefinite as possible in order that the student might be able to proceed in all possible directions thereafter.

It is noteworthy, that after the enthusiasm with which the elective system was adopted by the leading colleges of the country, a reaction has recently set in against it. It seems not likely that the system will be altogether abandoned anywhere, but modifications and limitations of a corrective character have in many quarters been adopted or at least prominently advocated. Thus the College of Arts and Sciences of Cornell University has recently adopted regulations which limit in various ways the student's choice of about one-third of the units required for graduation; the faculty, however, remaining "loyal to the principle of the election of studies." (President's Report, 1905-1906, p. 26.) It has been felt that the students need guidance—and, indeed, none have felt this more keenly than the students themselves. Ask any college senior, and he will tell you that the elective system is no doubt the best in itself, in that it offers the greatest opportunities of self-improvement to the student; but that the average freshman or sophomore does not know his own needs or intentions well enough to make a wise use of his opportunities.

To the student of education, certain observations upon this whole movement and counter-movement are now beginning to be fairly obvious. First, the colleges of the country are fairly committed to the free elective system; without it they cannot fulfill the functions which have grown upon them. Secondly, the limita-

tions upon free election which have been generally proposed are wholly inadequate to correct the undoubted weaknesses of the system. If the regulations are made rigid enough to ensure the interests of the majority, they at once become oppressive to an important minority. If they are so light as to encumber no one, then they serve to curtail only the grossest and most obvious abuses. Thirdly, the students entering college are not prepared to take proper advantage of the elective system. That requires, for one thing, an appreciation of the correlation of studies, such as the freshman can scarcely be expected to have. Fourthly—and this I conceive to be the heart of the whole matter—the adoption of the elective system by the colleges logically implies a far more extensive preparation than is now anywhere exacted, or than can be exacted from high schools with their present four years' course.

In a word, the college of the future must have behind it high schools offering a well-rounded and adequate secondary education. Such a course would itself provide for a considerable amount of election; but its requirements would assure an introduction to all the chief departments of intellectual culture—let us say, languages and literature; history and political economy; mathematics; physics, chemistry, biology, and geology; and psychology. In such a scheme, certain important vocational studies would assuredly hold an honored place; if not as a part of the requirements—for many students might profitably postpone that sort of work till a later period—then as urgently recommended electives. For it is not to be denied that these studies have a peculiar moral value, quite as estimable in its way as the scholar's devotion to pure science—a moral value which is shown in the habits of manly endeavor which they not uncommonly induce.

To a school offering a course of this character, the problem of college matriculation credits would be of very little concern. The colleges would accept its graduates as unquestioningly as they now receive students from each other or from reputable normal schools. And in its own community it would be a wonderful civilizing power. It would do for immense numbers what the college of a generation ago did for the comparatively few, and do it much better. That this is what the American high school is coming to, we can now scarcely doubt. The advanced credits which the better organized schools

are now able to secure for their graduates who enter college are but an indication of the drift of things. The lopping off of old and useless excrescences from the work of the elementary school would save at least a year, and very possibly two years, for the lengthened high school course; and the better articulation of the work of the lower and middle schools may mean almost as great a gain, if not in time, then in efficiency. The problem in this regard, as it today confronts us, is almost purely one of administrative detail.

Thus I feel sure that the advocates of the present measure are certain to gain their real end in the not distant future, not through the recognition of vocational studies by the colleges, but as they have gained similar ends in the past—through the development of the high schools themselves.

CONCLUSION

As matters stand, however, I do not see that this particular measure is to be very widely recommended. Some colleges, no doubt, will find it to their advantage to allow the desired entrance credits; but in general there appears to be very little occasion for the innovation, and very little good to be derived from it. Three classes of high school students would be affected. First, there would be those who elected these studies without intending to follow the vocations to which they led, but who hoped for an easier or more congenial method of getting into college. Such students might or might not be disappointed; but in either case they would almost certainly fail of the discipline of the vocational studies, in addition to losing that of the theoretical studies. At any rate, these young ladies and gentlemen could have no very large claims upon our consideration. Secondly, there would be those who intended eventually to make use of what they had learned, but to go to college first. In their case, the presumption would be that the vocational studies might better be postponed until a more adequate theoretical basis had been obtained. Exceptions would occur, but I doubt whether legislative provision ought to be made for these. Thirdly, there would be those who originally hoped for nothing better than to get a position when they graduated, but who later on found the means, or awoke to the ambition, of going to college.

Such students would, of course, be helped by the proposed measure ; but as previously intimated, the obstacles which they have at present to overcome are not serious.

And when we deliberately face the question which was announced above—whether the vocational studies possess a culture value that warrants their displacing such subjects as history or biology in the earlier stages of a liberal education—we must, I think, answer it in the negative. If there were time for all things, we should not have to choose ; but in so far as the time is limited we feel that the theoretical subjects should take precedence. To put the proposition in naked terms, that in education all the theoretical should precede all the practical, is to commit an evident absurdity and to invite obvious criticism. But it must not be forgotten, in the first place, that, so far as the moral discipline of contact with the fundamental economic problems of life is concerned, fate kindly provides that for a goodly number of our students—their life is not all one of pure theory ; and, in the second place, that the entrance requirements as they stand are not so high as altogether to preclude a certain amount of voluntary vocational work in the high school. Taking all things into consideration, I for one feel driven to the conclusion, that for the high school boy or girl who is to go to college, it is more important to lay a broad foundation of theoretical knowledge that shall serve as a basis for his future general civic usefulness, than to devote himself at once to the direct preparation for a vocation. Great as is the value of the vocational subjects, I cannot regard it as equivalent—for such persons, at such a period—to that of the purely theoretical subjects. They will have time hereafter to learn to better advantage the practice of their vocation.

IV

VOCATIONAL STUDIES FOR COLLEGE ENTRANCE REQUIREMENTS

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DEFINITION OF TERMS

"Shall vocational studies be accepted for entrance to college?" Before entering upon a discussion of the question it seems necessary to define "College" as the educational institution which confers upon its graduates the first bachelor's degree—A.B., B.S., or Ph.B. By vocational studies we mean those studies, which, either by their very nature or because of the point of view from which they are taught, tend to prepare directly for specific efficiency in handicraft, business, or profession. For example, manual training and freehand and mechanical drawing for the trades; commercial geography, history of commerce, history of the United States with especial reference to industrial aspects, commercial law, banking, and finance, and industrial chemistry for the various commercial pursuits.

The question under discussion, then, is: Shall those studies which prepare directly for specific efficiency in handicrafts, commerce, and profession be accepted for entrance to those collegiate courses at the close of which the first academic degree is granted?

WHAT COLLEGE ENTRANCE REQUIREMENTS SIGNIFY

A study of the history of the enlargement of the college entrance requirements during the past two centuries fails to reveal the fact that subjects have in the past been placed on the list for college entrance because of their definite relation to the understood function of the college. New studies have frequently been tried in the secondary schools and because they have there proved their efficiency and because the schools have been insistent in their demands they have finally been accepted by the colleges. As early as the year 1800 our academies taught English grammar, geography,

algebra, geometry, natural philosophy, astronomy, music, composition, logic, but our colleges introduced these subjects at a later date. On the other hand, certain studies have been imposed by the colleges upon the schools as subjects proper for the preparation for college work. But there seems to have been no underlying principle which has determined the question of proper preparation for college.

Commissioner of Education Brown in "The Making of Our Middle Schools" says, "the idea of liberal culture was the dominant note of both academy and college education in the nineteenth century." This idea of liberal culture perhaps determined then more largely than any other educational procedure during the nineteenth century. The twentieth century will by no means give up this idea of liberal culture, but it bids fair to add the ideas of efficiency and service as influential factors in educational procedure.

If liberal culture, efficiency, and service are the educational ideas to guide us it behooves us to question seriously whether the college entrance requirements of today permit the secondary schools to train in the broadest way for culture, efficiency, and service. It has become more or less a custom for us to look to Harvard University for leadership in educational matters. The Harvard College entrance requirements today render it impossible for the graduates of our best manual training and commercial high schools to gain admission and yet who will claim that such graduates are less well trained than the graduates of our preparatory courses? It may be claimed that these graduates may enter the scientific schools, but this is not our contention. Is there any good reason why a graduate of one of our best secondary schools should be denied admission to the course leading to the bachelor's degree?

In other words, what do the college entrance requirements signify? What do our colleges want in the way of maturity, knowledge, and training in order that a young man may pursue college courses with profit? It seems to the writer that the college entrance requirements as stated in the announcements of our great educational institutions are but symbols of the training and maturity required for the pursuit of college courses. Harvard College practically requires a minimum of seven studies for entrance but permits no freshman to pursue seven studies at one time. Moreover not one of the subjects required for entrance, except English, is required

in any of the years of the college course. In other words the subjects required for entrance are not considered primarily as preparatory to the pursuit of the same studies in college. Hence we must conclude that the college demands of those desiring to enter its courses a certain modicum of knowledge of a number of subjects and more than this it demands a certain degree of maturity, a habit of work, and a facility in mental application.

Now, I presume, no one would claim that Harvard's list of options includes all those subjects the pursuit of which may give the maturity, the habit of work, and facility in mental application demanded. On the other hand, this list might reasonably be criticized as being somewhat one-sided. The schools are endeavoring to train in their students the power of self-expression and by no means limit the effort to training in verbal expression. Through the work in music power of tonal expression is developed; through freehand and mechanical drawing the power of graphic expression is developed; through the various lines of shop work the power of constructive expression is developed. In other words, our schools are trying to develop the complete power of self-expression.

ENTRANCE REQUIREMENTS AT PRESENT ARE ONE-SIDED

Few of our colleges require more than the power of verbal expression as measured by the requirements for admission, and in this respect the tests for admission are one-sided. Dean Woodward of Washington University says, "The requirements for entering upon college or university work should be general fitness and not familiarity with a particular subject; general strength to undertake new work in a new field." It is evident then that our list of subjects which may be presented for college entrance might be somewhat broadened.

But what does the college demand of a subject before it is accepted as an entrance requirement?

1. It shall possess sufficient content;
2. It shall be systematic;
3. It shall be well taught;
4. It shall be both informational and disciplinary.

The secondary school makes the same demands of all studies admitted to its program of studies but in addition demands that

subjects shall bear some relation to the environment of students and shall train for efficiency. Why is Greek practically relegated to the University as a subject of study? It certainly fulfils the fourfold requirement of the college—it has sufficient content, is systematic, is well taught, and is both informational and disciplinary, but it relates only slightly to environment and does but little in fitting its devotees for service and efficiency. Hence, it is gradually disappearing from the program of study of secondary schools.

The closer articulation of school and college seems to demand that the college shall enlarge its scheme of requirements so as to include those subjects which do train for efficiency and service. The most characteristic weakness in the subjects ordinarily required for entrance to college is the entire absence of application to things and affairs of daily life; e. g., our geometry and algebra as taught are pure abstractions and the student finishes these subjects with little or no appreciation of their practical applications. The vocational studies, on the other hand, are in their very nature practical and bear the most practical relations to the life about us.

PRESENT LIMITED RECOGNITION OF VOCATIONAL SUBJECTS

There is at present great diversity among our colleges in permitting certain vocational studies to be offered for entrance. Harvard College permits drawing and music; Leland Stanford, drawing, music, manual training; University of Missouri, drawing; Columbia, music, drawing, manual training. Unfortunately our women's colleges are least progressive in enlarging the scheme of entrance requirements. So far as the writer has been able to discover no woman's college accepts either domestic science or domestic art as an entrance subject. Our secondary schools throughout the country are in agreement in admitting manual training, drawing, music, and commercial branches to their program of study. Our secondary schools have proved beyond doubt the value of these vocational studies as elements in the training of boys and girls. Since our schools are in agreement as to the value of vocational studies and since some colleges already accept these studies for entrance it is only a question of time when any graduate of one of our best secondary schools will find it possible to enter any college of the land on the subjects he has studied in his secondary school.

It was in the days of Timothy Dwight, the elder, that natural science was looked upon as perhaps a valuable subject of study for some students but by no means necessary for the student preparing for college. But natural science was admitted to the program of study in secondary schools and having proved its value was eventually required for college entrance. The attitude toward the vocational studies is similar to that toward natural science in the days of Dwight. One by one subjects which have proved their efficiency have been accepted for admission by the colleges. Our colleges must eventually accept for admission any subject which has proved itself worthy as an element in training boys and girls of the secondary school. Judgment may differ as to what certain studies do accomplish; it may take years to secure agreement as to educational values, for there is no necessity for haste in educational procedure, but eventually our higher institutions will be compelled to accept those subjects which in the judgment of secondary-school teachers, school officials and parents have proved their efficiency in training for service and life in the community.

Believing that the testimony of men actively interested in schools giving training in vocational lines would be of value in this discussion a note of inquiry brought forth many interesting and valuable statements. In reply to the inquiry, "Do you consider the graduates of your school capable of pursuing with profit a college course leading to the bachelor's degree?" the following testimony was received from representative headmasters. Principal Frank Rollins, The Stuyvesant High School, New York City: "I am very glad to say that a considerable number of our boys are planning to take such courses and I am confident that they will do college work with profit." Mr. C. W. Permenter, headmaster of the Mechanic Arts High School, Boston, Mass.: "Many graduates of the Mechanic Arts High School make a creditable record in the Massachusetts Institute of Technology and the Lawrence Scientific School of Harvard University. There is no good reason for thinking that many of these men would not pursue successfully courses leading to the degree of A.B., if such courses were open to them." Mr. William L. Sayre, principal of the Central Manual Training High School in Philadelphia, says: "The graduates of this school are admitted on their diploma to the college departments of the Uni-

versity of Pennsylvania, Lehigh University, Lafayette College, and (with the exception of English) Cornell University. Their records in these institutions show that they stand shoulder to shoulder with graduates from other high schools and that in many cases take high honors. I have reason to believe therefore that our graduates could successfully take up college courses leading to a bachelor's degree." Such testimony at least shows that school men have confidence in the kind of training afforded by vocational studies as fitting for college entrance.

ENLARGED USEFULNESS OF THE COLLEGE AND HOW REALIZED

Colleges no longer exist primarily for the training of leaders. The increase in attendance at our degree-granting institutions has been enormous in the last quarter of a century. Our college clientele is no longer such a carefully selected lot of young men and women. The class of people who were a generation ago satisfied with secondary-school training for their children are today seeking collegiate training for their sons and daughters. The next twenty-five years will witness a continuance of this enlargement of attendance at our higher institutions, if our colleges meet the demands the public will surely make upon them; and the public will demand more and more a training suited to those who are not destined either by nature or environment for the traditional professions.

For too long a time our schools made provisions only for what psychologists describe as "men (boys or girls) of thought." Boys and girls of "feeling" and "action" have been the problems in the school. But today our schools are meeting the needs of all three types.

Our college entrance requirements, however, still test the boys and girls too largely on one side—thought. The future will demand more and more that college opportunities shall be open to the "feeling" and "action" type of boy and girl as well as to the "thought" type. And in order that such may be the case credit will be given by the college to the value of the so-called vocational studies pursued in the secondary schools. Our country seems destined to become a country of college-trained men and women.

If my statement that the college exists no longer simply for the training of a select few but rather for the upbuilding of the masses

of our population; if my statement that certain vocational studies—drawing, music, manual training, cooking, sewing, commercial geography, history of commerce, industrial chemistry, commercial law—have proved their efficiency in the training of boys and girls of secondary-school age; if my statement that the college must eventually accept for admission those subjects which have proved their worth in the secondary schools; if these three statements are correct, then what credit shall the college assign to each of these subjects in the general scheme of requirements? How shall the balance be struck between the vocational studies and the traditional subjects required by the colleges? On the Harvard basis of twenty-six points for entrance it would seem a fair thing to assign credits as follows:

| | |
|--|----------|
| Shop work (four years) | 4 points |
| Freehand drawing | 2 points |
| Industrial history of the United States..... | 2 points |
| Commercial geography | 2 points |
| Domestic science | 2 points |
| Domestic art | 2 points |

The above list is simply suggestive as indicating the proper method of procedure in striking the balance between the traditional college entrance subjects and the vocational studies.

When our colleges accept for entrance subjects which have proved their worth in the secondary schools, then will our schools cease to be mere "fitting schools" and the best thought of school men will be given to a consideration of the training best suited to boys and girls of secondary-school age.

V

COLLEGE ENTRANCE CREDITS FOR VOCATIONAL SUBJECTS

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INTRODUCTION—THE SITUATION

The importance of thorough preparation of applicants for admission to college is not questioned by any observant teacher of a secondary school. Experience has taught that lack of preparation is not only discouraging to the ill-prepared student who attempts to do advanced work, but detrimental to others who are obliged to work with him; some of their time is spent unprofitably and his development is hindered if not wholly prevented. The success of class instruction depends upon proper grading. Not to recognize this fact, not to secure proper conditions in this respect, is to invite failure.

The growing insistence of schools of medicine and law upon adequate preparation of applicants shows plainly the present trend of educational thought in this direction. The demand for uniform college entrance requirements heard on all sides has arisen not from criticism of existing requirements, but from the desire to satisfactorily prepare applicants for admission to all colleges by a course of instruction acceptable to all rather than by many courses respectively satisfactory to each.

The diversity of requirements has resulted from local conditions and special emphasis laid by different colleges upon certain subjects or topics deemed of peculiar importance by these colleges, and it has been perpetuated by the isolation of the colleges from each other and from the great number of public high schools which have come into existence in the development of the public system and have framed their courses of study to meet the needs of the children of the public schools and to articulate closely with the work already done by them.

SECONDARY EDUCATION IN ITS RELATION TO ELEMENTARY AND HIGHER

There have been two points of departure in educational matters, the primary school and the college. The college demanded preparation for entrance and created the preparatory school. The stability of our form of government, the development of natural resources, and the growth of manufactures and commerce requiring directive intelligence necessitated the extension of the course of public instruction beyond the primary grades, and the high schools were multiplied.

The establishment of state universities at the end of the course of public education had as its logical presupposition the articulation of primary and higher institutions through the medium of the secondary schools. It is for the primary school to receive the children from the home and to train them to reasonable proficiency in elementary subjects. For this training eight years have been found requisite under ordinary conditions. The high school receives the children at this stage of their development and carries their education forward for a period of four years, disclosing to the responsive mind the various lines of human endeavor and achievement. It is for the college to further train such young men and women as have made good use of their twelve preparatory years and have shown by the work done that they can profitably undertake more advanced work. There should be no chasm between the college and the four-year high school with adequate equipment and thorough instruction.

DETERMINATION OF STANDARDS FOR ADMISSION TO COLLEGE

The state universities in the earlier days of their establishment because of the necessity of articulation with existing high schools of low standard have been obliged to modify their requirements of admission, but this condition is undesirable and calls for speedy amendment by increased efficiency of high schools. And such has been the history of the changing relation between high schools and state universities everywhere, a record of provisional articulation resulting from temporary adjustment of needs to attainment, with reasonable increase of demands from year to year on the part of the state university and steady increase of efficiency of high schools to meet these reasonable requirements.

Just what subjects should be required for entrance is an unsettled question and must remain so until education becomes a science and all phases and processes are completely understood. Some institutions still adhere very closely to original positions, others have modified their demands to suit changed conditions. The fact that is most potent for change is the increase in the number of those who desire to attend college without any intention of following a profession, who recognize the value of college training for leadership in any line of service, and have become convinced that higher education is profitable for both material and spiritual things, for both living and making a living. This deserved recognition and practical commendation of the work of the higher institutions is one of the most encouraging signs of the growth in intelligence of individuals and communities; but this increased attendance of men and women with widely diverging plans and conceptions will no doubt have a tendency to change ideas as to the course of study to be furnished before and after entrance, in preparation and in participation.

The evolution of a science of education will be conditioned by the determination of the effect upon the development of the mind of each study pursued or proposed. Too long teachers have worked in the dark as to the nature of the minds to be developed and as to their reaction upon the subjects of study. They have taught language, mathematics, history, science, rather than boys and girls, young men and young women, through these media.

Scientific pedagogy has for its condition precedent the scientific observation and recording of the mental phenomena resulting from the study of the various subjects of the curricula. Little has been done in this direction. Diligent search fails to discover such records of observations made by competent observers under suitable conditions. There are teachers of every subject taught who have a reasonably thorough and comprehensive knowledge of it and are successful in imparting instruction to those they strive to teach, but there are few consciously scientific teachers who are aware of the possibilities and are working steadily and confidently toward expected educational result.

In recent years educators have begun to recognize the importance of a study of childhood and youth, that the process of development and the natural sequence of the phases of growth may be noted

and may receive the consideration necessary to secure the best results in education. Next in order should come the careful investigation of the effects the study of each subject produces under given conditions upon the evolution of the individual. When this has been ascertained it will be possible to frame with assurance courses of study that will prepare for useful, satisfying lives.

The widening of the field of education through the enrichment of the courses pursued has resulted from changes in the needs and requirements of youth as individuals living in a growing civilization. Recognizing the changes in the environment of young men and women, educators have sought to prepare them to meet existing conditions and to improve the opportunities offered.

PRESENT STATUS OF VOCATIONAL STUDIES FOR COLLEGE-ENTRANCE CREDIT

Wisely conservative and unwilling to jeopardize the interests of those committed to them, teachers of youth have made innovations only when they were convinced of their pedagogic value. Thus the sciences forced their way into the curricula of the schools and higher institutions until they were given full recognition and approval. Thus also manual training has received recognition and the vocational subjects such as commercial arithmetic, bookkeeping, stenography, typewriting, commercial law, commercial geography, and commercial history are asking consideration.

An examination of the catalogues of twenty state universities of the central, northern, and western states and of an equal number of endowed colleges shows that of the entire list only five allow any credit for commercial arithmetic; five, for bookkeeping; two, for stenography; two, for typewriting; three, for commercial law; three for commercial geography; one, for history of commerce. Of the same list of higher institutions eleven mention manual training among the subjects that may be offered in satisfaction of entrance requirements.

Of the colleges and universities that offer higher commercial courses, as far as I have been able to ascertain, not one accepts any vocational subjects for entrance or recognizes these subjects in its admission requirements.

If these subjects are to be recognized as affording training for

subsequent work in higher institutions, evidently it will have to be demonstrated that they are equivalent in disciplinary power to some of the subjects already included in the list of those that may be offered in satisfaction of entrance requirements. They will have to do what the sciences have done, namely, prove their fitness as preparatory subjects for the development of intellectual power to profitably pursue advanced work in college and university.

WHAT CREDIT-VALUE SHOULD BE ASSIGNED VOCATIONAL SUBJECTS?

On the supposition that vocational subjects have educational values, what would be a reasonably proportionate allowance in a scheme of entrance requirements in view of the values assigned to the several subjects now included in the list of those accepted by the various universities and colleges? Taking the universities of Harvard, Dartmouth, Chicago, Michigan, Illinois, and Ohio as typical and averaging the percentage of entrance requirements that may and must be furnished by various lines of study, I find that

English may furnish 20%, must furnish 20%

History may furnish 20%, must furnish —

Mathematics may furnish 25%, must furnish 20%

Languages may furnish 40%, must furnish 15%

Science may furnish 30%, must furnish —

There is practical uniformity in the valuation of English and mathematics. History varies from 0% to 13% as a required subject and from 14% to 27% as an elective subject. Science varies from 0% to 13% as a required subject and from 10% to 50% as an elective. Foreign languages vary from 0% to 20% as required subjects and from 27% to 53% as electives.

The number of periods spent on vocational subjects, estimating the periods given to bookkeeping and typewriting as laboratory periods would suggest $\frac{1}{2}$ or 1 credit for bookkeeping, 1 credit for stenography and typewriting, $\frac{1}{2}$ credit for commercial law, $\frac{1}{2}$ credit for commercial geography, $\frac{1}{2}$ credit for history of commerce, in all 3 or $3\frac{1}{2}$ credits, if one credit represents 180–200 periods of work requiring preparation.

If the high schools of St. Louis may be taken as a norm, the vocational subjects occupy 1500 periods out of 4400 periods or 1140

periods out of 4040 periods. The four-year commercial course consists of

- 800 periods of English,
- 300 periods of history,
- 600 periods of science,
- 400 periods of mathematics,
- 400 periods of foreign language,
- 400 additional periods of a foreign language or of drawing,
- 100 periods of civil government,
- 100 periods of economics,
- 120 periods of penmanship,
- 80 periods of business arithmetic,
- 300 periods of bookkeeping,
- 300 periods of stenography,
- 300 periods of typewriting,
- 100 periods of commercial law,
- 100 periods of commercial geography,

in all 4400 periods of work, of which 1500 periods are given to vocational subjects, or 1140 periods out of 4040 periods, if book-keeping, penmanship, and typewriting are estimated as subjects that do not require preparation.

The work in the commercial course not vocational would entitle the graduate to

- 4 credits for English,
- 2 credits for language,
- 2 additional credits for language or
- 1 credit for drawing,
- 2 credits for mathematics,
- 1 credit for history,
- 3 credits for science,

nearly enough credits for admission to most colleges.

The vocational subjects take the time which in the college scientific course is given to other subjects, namely science, 200 periods; mathematics, 480 periods; language, 600 periods; history, 100 periods; for which six credits ordinarily would be allowed.

Work in civics and economics is frequently accorded $\frac{1}{2}$ credit

for each subject. The work in commercial geography and history of commerce would seem very similar to work done in history in which the commercial development of various countries receives considerable attention. The work in penmanship presumably no one would expect to be given credit and that in commercial arithmetic would hardly be considered apart from bookkeeping in which it finds its application.

It remains to consider the claims of bookkeeping, stenography, and typewriting.

Bookkeeping is essential to business transactions of which it is the record, but it does not require or develop a high order of power. Its principles are few and once mastered are not difficult of application. The system and accuracy demanded are valuable acquisitions and the classification of each transaction trains the power of judgment within certain narrow limits. It is doubtful, however, whether the time spent upon it could not be better employed were it not for its practical value. If the salaries paid for such services are an index of the estimation of the business world of the grade of ability requisite, its rank is not high.

Stenography as a system of symbols for the rapid recording of speech and thought has extensive practical use. Moreover, its demands upon the intelligence of the user cultivate alertness and quickness of apprehension and call into exercise power of concentration and attention; while, the transcription of stenographic notes exercises the memory and trains in comprehension and expression of thought. Nevertheless, were it not for the facility its mastery affords, I should question the wisdom of devoting to its study the time required for its acquisition.

Apart from stenography, typewriting would be only a form of manual dexterity. Memory is exercised and practice in forms of expression is acquired. Spelling, capitalization, punctuation, paragraphing, are impressed, and neatness, accuracy, and quickness are taught by constant repetition but the time spent in learning typewriting would not be well spent, if it were not for the facility it affords.

REPORT OF THE SECRETARY

I. MINUTES OF MEETINGS HELD AT LOUISVILLE, KY., FEB. 26, AND 28, 1906

Monday, Feb. 26.—An open meeting had been arranged for to be held in the Warren Memorial Church. Here over six hundred people gathered and listened from eight o'clock until ten to the discussion of George P. Brown's *Yearbook* on the study of English. The following members gave short, pointed, stimulating discussions. All excepting Mr. Brown, the author, were limited to ten minutes each, and occupied the full time:

George P. Brown, Bloomington, Ill.

Pres. L. H. Jones, Michigan State Normal College, Ypsilanti.

Prof. George M. Forbes, Rochester University, Rochester, N. Y.

Prof. W. S. Sutton, University of Texas, Austin.

Supt. Stratton D. Brooks, Boston, Mass.

Prof. Samuel T. Dutton, Columbia University.

Pres. Charles McKenny, State Normal School, Milwaukee, Wis.

Prof. Reuben Post Halleck, Boys' High School, Louisville, Ky.

Miss Ada Van Stone Harris, Supervisor Kindergarten and Primary Education, Rochester, N. Y.

J. Stanley Brown, Township High School, Joliet, Ill.

F. Louis Soldan, Superintendent of Instruction, St. Louis.

Each speaker discussed a specific, limited phase of the subject.

This meeting was considered one of the best the Society ever held. It certainly was a notable meeting in that the large audience gave uninterrupted attention until ten o'clock, at which hour President Dexter ended the discussion by declaring an adjournment.

Although this meeting was a great popular success, and like all such meetings, was highly gratifying to writers and speakers, yet it is doubtful if a strictly scientific body can fittingly lend itself to popular demonstrations. Such a meeting always takes the time and absorbs the opportunity for a meeting at which members should get down to close and severe study and exchange of views on the problem before the Society.

Wednesday, Feb. 28.—At four o'clock P. M., about forty active members gathered in the parlors of the First Christian Church, Pres. Edwin G. Dexter presiding.

Minutes of Asbury Park meetings were approved as written in the *Yearbook*.

Moved, That the Secretary get a stenographic report of discussions at meetings of the Society and print the same in the minutes.

Two main objections were urged against this motion: first, it would involve too great an expense for printing; and second, such reports might often be of questionable value.

After two amendments the motion was passed as follows: That members of the Society submit to the Secretary abstracts of their discussions for printing in the *Yearbook* when requested by the Executive Committee.

President Dexter ruled that discussion of Mr. Brown's monograph, "The Teaching of English in Elementary and High Schools" be taken up first, and that at five o'clock he should call for business, unless the Society instructed otherwise.

Discussion was continuous for one hour, yet very few of the main propositions or problems of Mr. Brown's study were touched upon. This suggests the value of planning for a consideration of the main points in a paper, and allotting to each point its proportional part of the available time.

The following members took leading parts in the discussion: Homer P. Lewis, Stratton D. Brooks, Charles A. McMurry, W. J. McConathy, Thomas H. Briggs, Jr., John W. Cook, Ossian H. Lang, L. H. Jones, Francis G. Blair, and others.

Hereafter when recording the names of new members the items of biographical information called for in the application blanks will be given for more complete identification. The following persons were elected to Active Membership at Louisville:

Thomas H. Briggs, Jr., A.B., Wake Forest (N. C.) College, and the University of Chicago; instructor in English, Eastern Illinois State Normal School, Charleston, Ill.

Elizabeth H. Bunnell, A.B., Mount Holyoke Seminary, A.M., Columbia University; teacher of English, Training School for Teachers, Brooklyn, N. Y.

Ira I. Cammack, B.S., Earlham College; principal of Central High School, Kansas City, Mo.

John W. Carr, A.B. and A.M., Indiana University; superintendent of instruction, Dayton, Ohio.

Albert S. Cook, A.B., Princeton University; superintendent of schools, Baltimore County, Md.

Emma C. Davis, supervisor of primary education, Cleveland, O.

Mary E. Doyle, superintendent of training, State Normal School, Superior, Wis.

Lida B. Earhart, student in Columbia University; formerly training teacher in State Normal School, Whitewater, Wis.

A. C. Fleshman, M.S. and A.M.; professor of pedagogy and training, State Normal School, Slippery Rock, Pa.

J. Montgomery Gambrill, Baltimore Polytechnic Institute, assistant state superintendent of education, Baltimore, Md.

Herman C. Henderson, A.M., University of New Brunswick, and University of Chicago; professor of pedagogy, State Normal School, Milwaukee, Wis.

Patty S. Hill, head of Louisville Kindergarten Training School, Louisville, Ky.

H. H. Holmes, B.S., instructor in mathematics, Central High School, Kansas City, Mo.

Horace H. Hollister, A.B. and A.M., Iowa State University; high school visitor, University of Illinois, Urbana, Ill.

Benj. J. James, A.M., Northwestern University, Chicago University; superintendent of schools, Waukesha, Wis.

Charles H. Judd, A.B., Wesleyan University, Ph.D., University of Leipzig; assistant professor of psychology, and director of summer school, Yale University, New Haven, Conn.

W. H. Kirk, A.M., Baldwin University; superintendent of schools, East Cleveland, O.

Maria Kraus-Boelté, academic training in Germany and England; principal Kraus' Seminary for Kindergartners, Hotel San Reno, Central Park, New York, N. Y.

W. J. McConathy, principal Normal School, Louisville, Ky.

C. M. McDaniel, B.S. and A.M., Wabash College; superintendent of schools, Hammond, Ind., and principal Winona Lake Summer School.

Irving I. Miller, Ph.D., Rochester University and University of Chicago; professor of psychology, State Normal School, Milwaukee, Wis.

Bertha Payne, head kindergarten teacher, School of Education Chicago, Ill.

The nominating committee, consisting of J. H. Van Sickle, E. F. Buchner, F. E. Bolton, Charles McKenny, and J. Stanley Brown, reported the following nominations:

For President—Reuben Post Halleck, Louisville, Ky.

For Secretary-Treasurer—Manfred J. Holmes, Normal, Ill.

For Members of Executive Committee—W. S. Sutton, of the University of Texas, and Stratton D. Brooks, Boston, Mass.

The report was adopted and the nominees declared elected.

President Dexter read a communication from the President of the American Association for the Advancement of Science inviting the National Society for the Scientific Study of Education to affiliate with that organization. President Dexter then explained the probable advantages of becoming associated with such a scientific society, and how it would affect the constitution of the National Society. After considerable discussion the invitation was declined, and the President instructed to make appropriate response to the invitation.

The following report of the Committee on renaming the National Society for the Scientific Study of Education was next received.

To the National Society for the Scientific Study of Education:

Your committee appointed to make recommendations concerning the renaming of this Society, submitted a report at the Asbury Park meeting recommending the adoption of the name, "The National Society of Education." Because the question of affiliation with the American Association for the Advancement of Science was under consideration, it was deemed wise to defer final action and the question of renaming was referred back to the committee for further consideration to report at the February meeting, 1906.

Your committee wishing to secure a fuller expression of preferences than was possible at the time of making its first report, sent out additional inquiries to members with the following results:

Out of a total of thirty-three preferences, fifteen were in favor of the name "The National Society of Education," six favored the "American Education Society," and thirteen were scattering.

Your committee still holds that because of brevity and the retention of the larger part of the present name of the Society that the name "The National Society of Education" should be adopted. Inasmuch as the preferences of members, as far as expressed, were largely in favor of the name, your committee recommends that this Society be renamed "The National Society of Education."

Respectfully submitted,

H. E. KRATZ

F. G. BLAIR

W. S. SUTTON

Committee on Renaming

It was moved and seconded to adopt the report of the committee on renaming. After some discussion, the motion was voted on and lost.

Motion was then made and seconded to adopt the name "The Herbart Society." This motion was amended giving the Executive Committee discretionary power as to the use of the word "National" or "American" preceding the word "Herbart." The motion as amended was passed by a large majority.

This motion to adopt the name "The Herbart Society" was not offered as an amendment to the constitution, it was not so interpreted by the presiding officer, no announcement was made (in fact no vote was taken) as to whether the majority was the two-thirds majority required to amend the constitution; therefore, since a change of name involves a change in the constitution, the Executive Committee did not feel authorized nor warranted in introducing any change of name until the action of the Society should meet the requirements of the constitution.

Dr. C. A. McMurry suggested a valuable line of work the Society might encourage, namely, the formation of local clubs for the study and discussion of the *Yearbooks*.

II. STATUS AND PROSPECTUS OF THE NATIONAL SOCIETY

1. *Historical note.*—The National Society for the Scientific Study of Education is the lineal successor to the National Herbart Society which was organized at the Denver meeting of the National Educational Association in 1895. The National Herbart Society was born on the one hand of the serious need of advancing the status of scientific method in education in our country, and on the other hand of the progressive energy of a small group of the younger American educators. It was one of several characteristic movements in the history of education in the United States during the last decade of the nineteenth century. This decade marks a veritable renaissance in American education, and it would be a biased or superficial historian who should say that all the various phases of this renaissance were not essentially indigenous to America. The high-school movement was a vigorous and prolific outburst rather than a gradual growth because the need of secondary education for all the people had grown much more rapidly than provision for or even recog-

dition of such need. The reselecting and reorganizing the elementary course of study to more faithfully and adequately meet the requirements of modern life and the needs of the children was another conspicuous phase of this awakening. As a logical result of these two movements came the demand for better instruction and the more adequate provision for the education and training of teachers. It was in this decade that the child-study movement had its overflow, and when seen in the light of its true causal relations must be recognized as a highly important phase of this educational renaissance. The great improvement in methods and effectiveness of the work of the National Educational Association was a response to the educational situation. Some of the most progressive and aggressive young men of the country determined to equip themselves to meet the educational situation with the highest possible degree of effectiveness. Happily they truly discerned that the vital core, the very heart, of the educative process is the unitary action of learning and teaching; and that the art of teaching rests upon principles or laws that inhere in the nature of the learner and the subject-matter. They therefore concentrated their study upon the conditions and mental processes involved in learning, and upon the selection and organization of the content of the course of study. Some of these men went to Germany to get what help they could, while some stayed at home. Those who went abroad seem to have been deeply impressed and inspired by the educational doctrines of Johann Friedrich Herbart, who in a very true sense was the father of the scientific study of education. On returning to America these men applied themselves with serious devotion and great vigor to improvement in our courses of study and methods of teaching. They inaugurated a propaganda of educational ideas that for serious enthusiasm and popular contagion can hardly be paralleled. The chief studies, discussions, and writings focussed upon such central, organizing topics as "the doctrine of interest;" "the law of apperception;" "the selection and correlation (or concentration) of subject-matter of the course of study"—"the culture epoch theory" being a chief theme here;" "the formal steps of instruction;" "the ethical aim of education," etc. Now because these topics were also the central and fundamental ones in Herbart's pedagogy, the men who propagated the ideas in America under the Herbartian terminology, came to be

called Herbartians. They did not object to the distinction thus given, and when they finally organized themselves for greater effectiveness it was natural, logical, and appropriate for them to adopt the name they did. The first name was "The Herbart Society for the Scientific Study of Teaching."¹ The second form of the name was "The National Herbart Society for the Scientific Study of Education."² This second form of the name continued until 1899. For convenience the explanatory part of the name was omitted in everyday use.

The leaders of this national movement for a serious, intense, and scientific study of vital and pressing educational problems are well represented by the first "executive council," which continued in office from 1895 to 1899. They were Charles De Garmo, president, Nicholas Murray Butler, John Dewey, Wilbur S. Jackman, Elmer E. Brown, Frank M. McMurry, Levi Seeley, C. C. Van Liew, and Charles A. McMurry, secretary. It must not be inferred that all the names in this now noted list of American educators belonged to the "Herbartian" category. Both the personnel and the clientele of the Society from its inception show that the movement was broader than what is denoted by the term "Herbartian;" but the Society as a whole was for some years characterized and dominated by the stirring enthusiasm and aggressive leadership of those who were closely identified with the "Herbartian" topics. The first three *Yearbooks* show that the studies and discussions were almost entirely on the so-called "Herbartian" topics. The *Fourth Yearbook* shows a breaking up and a broadening out; while the *Fifth Yearbook* and its Supplement show that the thought has returned to the educational situation in its wider extent and its newer meaning. Then follows a year (1900) for which there is no record of any activity of the Society. No meetings were held and no *Yearbook* issued.

In February, 1901, the National Herbart Society for the Scientific Study of Education was reorganized with somewhat extended plan and purpose. The name remained the same excepting that the word "Herbart" was omitted and the explanatory part was included in the everyday use of the name.

2. *Purpose and method of the National Society.*—During its first stage the National Society "was organized for the aggressive dis-

¹ Preface to *First Yearbook*.

² *First Yearbook*, p. 204.

cussion and spread of educational doctrines," and it desired "to draw into its membership all teachers, students of education, and parents who wish[ed] to keep abreast of the best thought and discussion." The purpose, further, was "to give to the doctrines of Herbart, as of other educators, a thorough study and criticism;" and "to test all theories by the standard of practical usefulness." Some weeks before the N. E. A. meetings it published a *Yearbook* that contained one or more monographs on important educational topics carefully worked out by specialists in the field discussed. It was supposed that members would study the *Yearbook* before the meetings, thus preparing for able and profitable discussion. These books were also widely disseminated through the trade channels. The chief characteristic purposes of the Society in its first stage, therefore, were the writing of monographs on important educational topics, and the discussion of these monographs by members of the Society at their regular general meetings and by members organized as local round tables.

During its second stage the original purposes of the Society have been continued, but there are some distinctive characteristics added; e. g., the topics cover a greater scope of vital educational principles and problems; each active member of the Society is supposed to be seriously and patiently at work upon the study of some problem arising out of his immediate work, and that he is seeking the solution of his problem by a scientific method of procedure; thus the Society endeavors to help elevate the scientific character of both the personnel and the work of the teaching profession; it calls for expert inductive studies of prevailing conditions as a guide to intelligent treatment and improvement of these conditions; from time to time it calls for reports from active members indicating the specific problem under study, the method of proceeding in the study, and the results obtained; it is planning to issue a series of monographs collating and organizing the fundamental data—the conditions, processes, laws, and guiding principles—underlying the science and art of education; it seeks to cultivate a spirit of professional co-operation and reduce to a minimum the spirit of commercial competition. Its organ for all these purposes is the *Yearbook*, supplemented by circular letters and other communications, and close and careful discussion at the meetings. Some of these

projects are still on probation, and it is yet to be seen whether a society with such standards and purposes can be maintained by the teaching profession. I have not the slightest doubt that such a society can be maintained. There is great need for it, and there is a sufficient body of men and women who earnestly desire such an organization; what is needed is an organizing genius who can take hold of the situation and bring about the results desired.

III. ANNOUNCEMENTS TO ACTIVE MEMBERS

The Chicago meetings, Feb. 25-28, 1907.—Owing to the postponement of the San Francisco meetings, two topics will come before the Society at Chicago.

First, Prof. Ellwood P. Cubberley's monograph on "The Certification of Teachers" will be the basis for discussion for Monday evening, Feb. 25. This meeting will be held in the Auditorium Hotel, beginning at 7:30 P. M. Look for placard notice.

On Wednesday, P. M., 4:00 o'clock, the report of the committee on college entrance credit for vocational courses will be the basis of discussion. The place for this meeting will be announced by placard in the hotel lobby.

Supplementary meetings may be held if the Society so decides.

At the Wednesday session the regular annual business meeting will be held. The items of business so far as known at this writing are—

Election of officers.

A consideration of the policy and method of the Society. Should we issue more than one leading study a year? To what extent should the *Yearbook* contain reports from active members? Shall the *Yearbook* be an open forum for the thoughtful and dignified presentation of differences of opinion on questions that come before the Society? Shall there be established a new standard for Active membership? The right sort of standard could be made suggestive and stimulating to the younger members of the profession. This Society ought to be of such high character that membership in it will be a truly worthy goal for the more professionally ambitious of the young men and women who enter the field of education. Should not the standard for election to Active membership soon be something like this?—No person to be eligible until he or she has

undertaken the study or investigation of some educational problem (either theoretical or practical) and brought it to some more or less definite conclusion. The evidence of such serious professional and scientific spirit could be considered a qualification for Active membership.

Ought not the secretaryship and the editorship to be divided between two persons?

Shall the National Society print in its *Yearbook* the reports of committees of other societies especially when those reports are, or are to be, printed elsewhere? Shall the committee plan of study and investigation be carried on?

To the above, other items of business that members may suggest will be added.

IV. FINANCIAL STATEMENT

M. J. Holmes, Secretary-Treasurer, in account with The National Society
for the Scientific Study of Education for the year ending Dec. 31, 1906:

Debits—

| | | |
|--|----------|----------------|
| To cash balance per statement Dec. 31, 1905..... | \$153.96 | |
| To membership fees and dues for 1906..... | 430.00 | |
| To sales of Yearbooks prior to July, 1906..... | 22.61 | |
| | | <hr/> \$606.57 |

Credits—

| | | |
|--|----------|----------------|
| By printing and stationery..... | \$204.65 | |
| By office help and supplies..... | 98.25 | |
| By postage and express | 43.26 | |
| By traveling expenses | 35.10 | |
| By telephone and telegraph messages..... | 2.80 | |
| | | <hr/> \$384.06 |

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|--|----------------|
| Balance due the National Society | <hr/> \$222.51 |
|--|----------------|

The University of Chicago Press in account with the National
Society for the Scientific Study of Education (items
shown by memorandum bills and statements):

Debits—

| | | |
|--------------------------------|--------|----------------|
| Jan. 1 to Mar. 31, 1906..... | \$.75 | |
| April 1 to July 31, 1906..... | 3.05 | |
| August 1 to Dec. 31, 1906..... | 330.21 | |
| | | <hr/> \$334.01 |

Credits—

| | | |
|---|----------|----------------|
| Balance due the National Society per state- ment Dec. 31, 1905 | \$ 37.25 | |
| Jan. 1 to Mar. 31, 1906..... | 84.34 | |
| April 1 to July 31, 1906 | 77.88 | |
| Aug. 1 to Dec. 31, 1906..... | 204.93 | |
| | | <hr/> \$404.40 |
| | | <hr/> \$70.39 |

| | |
|--|----------------|
| Balance standing to credit of the Society Dec. 31, 1906..... | <hr/> \$292.90 |
|--|----------------|

ACTIVE MEMBERS OF THE NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

Zonia Baber, School of Education, Chicago, Ill.
Frank P. Bachman, Normal College, Ohio University, Athens, Ohio.
William C. Bagley, State Normal College, Dillon, Mont.
C. M. Bardwell, Superintendent of Schools, Aurora, Ill.
R. H. Beggs, Principal Whittier School, Denver, Colo.
Ezra W. Benedict, Principal of High School, Warrensburg, N. Y.
Francis G. Blair, Superintendent of Public Instruction, Springfield, Ill.
Frederick E. Bolton, State University of Iowa, Iowa City, Iowa.
Richard G. Boone, Editor of "Education," 80 Bruce Ave., Yonkers, N. Y.
Eugene C. Branson, President State Normal School, Athens, Ga.
Thomas H. Briggs, Jr., State Normal School, Charleston, Ill.
Sarah C. Brooks, Principal Teachers Training School, Baltimore, Md.
Stratton D. Brooks, Superintendent of Schools, Boston, Mass.
George P. Brown, Editor "School and Home Education," Bloomington, Ill.
John F. Brown, University of Wyoming, Laramie, Wyo.
J. Stanley Brown, Superintendent Township High School, Joliet, Ill.
Martin G. Brumbaugh, Superintendent of Schools, Philadelphia, Pa.
W. J. S. Bryan, Principal Central High School, St. Louis, Mo.
William L. Bryan, President Indiana University, Bloomington, Ind.
Edward F. Buchner, University of Alabama, University, Ala.
Elizabeth H. Bunnell, Training School for Teachers, Brooklyn, N. Y.
Jesse D. Burks, Principal City Training School, Albany, N. Y.
W. H. Burnham, Clark University, Worcester, Mass.
B. C. Caldwell, President Louisiana State Normal School, Natchitoches, La.
Ira I. Cammack, Principal Central High School, Kansas City, Mo.
John W. Carr, Superintendent of Schools, Dayton, Ohio.
Clarence F. Carroll, Superintendent of Schools, Rochester, N. Y.
C. P. Cary, State Superintendent, Madison, Wis.
Charles E. Chadsey, Assistant Superintendent of Schools, Denver, Colo.
P. P. Claxton, University of Tennessee, Knoxville, Tenn.
David E. Cloyd, Principal High School, Spokane, Wash.
Alexander B. Coffey, William and Mary College, Va.
Albert S. Cook, County Superintendent of Schools, Baltimore, Md.
John W. Cook, President State Normal School, De Kalb, Ill.
Flora J. Cooke, Francis W. Parker School, Chicago, Ill.

- F. W. Cooley, Superintendent of Schools, Evansville, Ind.
William I. Crane, Superintendent of Schools, Marshalltown, Ia.
Ellwood P. Cubberley, Leland Stanford University, Stanford University, Cal.
Frank M. Darling, 6532 Perry Ave., Chicago, Ill.
William M. Davidson, Superintendent of Instruction, Omaha, Neb.
Emma C. Davis, Supervisor of Primary Education, Cleveland, Ohio.
W. S. Dearmont, President State Normal School, Cape Girardeau, Mo.
Charles De Garmo, Cornell University, Ithaca, N. Y.
John Dewey, Columbia University, New York, N. Y.
Edwin G. Dexter, University of Illinois, Urbana, Ill.
Richard E. Dodge, Columbia University, New York, N. Y.
F. E. Doty, Secretary Civil Service Commission, Madison, Wis.
Mary E. Doyle, State Normal School, Superior, Wis.
Augustus S. Downing, Education Department, Albany, N. Y.
Charles B. Dyke, 961 Tenth St., Boulder, Colo.
Lida B. Earhart, 1230 Amsterdam Ave., New York, N. Y.
Gertrude Edmund, Lowell Training School, Lowell, Mass.
A. Caswell Ellis, University of Texas, Austin, Tex.
William H. Elson, Superintendent of Schools, Cleveland, Ohio.
Frederic E. Farrington, University of California, Berkeley, Cal.
David Feimley, President Illinois State Normal University, Normal, Ill.
Frank A. Fitzpatrick, Manager American Book Co., Boston, Mass.
A. C. Fleshman, Kentucky State College, Lexington, Ky.
George M. Forbes, Rochester University, Rochester, N. Y.
J. M. H. Frederick, Superintendent of Schools, Lakewood, Ohio.
J. M. Frost, Superintendent of Schools, Muskegon, Mich.
J. Montgomery Gambrill, Assistant Superintendent of Education, Baltimore, Md.
Charles B. Gilbert, 1170 Broadway, New York, N. Y.
Wilbur F. Gordy, Superintendent of Schools, Springfield, Mass.
Maximilian P. E. Groszmann, Director the Groszmann School, Plainfield, N. J.
W. N. Hailman, Chicago Normal School, Chicago, Ill.
Reuben Post Halleck, Principal Boys' High School, Louisville, Ky.
Rufus H. Halsey, President State Normal School, Oshkosh, Wis.
Cora M. Hamilton, State Normal School, Macomb, Ill.
Paul H. Hanus, Harvard University, Cambridge, Mass.
Ada Van Stone Harris, Supervisor Primary Education, Rochester, N. Y.
W. H. Hatch, Superintendent of Schools, Oak Park, Ill.
Josephine W. Heermans, Principal Whittier School, Kansas City, Mo.
Herman C. Henderson, State Normal School, Milwaukee, Wis.

- J. W. Henninger, 6433 Monroe Ave., Chicago, Ill.
Cheesman A. Herrick, Central High School, Philadelphia, Pa.
Albert Ross Hill, University of Missouri, Columbus, Mo.
Patty S. Hill, Kindergarten Training School, Louisville, Ky.
Florence Holbrook, Principal Forestville School, Chicago, Ill.
Horace H. Hollister, University of Illinois, Urbana, Ill.
H. H. Holmes, Central High School, Kansas City, Mo.
Manfred J. Holmes, Illinois State Normal University, Normal, Ill.
Wilber W. Howe, Superintendent of Schools, Whitehall, N. Y.
Walter Ballou Jacobs, Brown University, Providence, R. I.
Benjamin B. James, Superintendent of Schools, Waukesha, Wis.
Jeremiah W. Jenks, Cornell University, Ithaca, N. Y.
Lewis H. Jones, President State Normal College, Ypsilanti, Mich.
Charles H. Judd, Yale University, New Haven, Conn.
Grant Karr, Teachers Training College, New York, N. Y.
John A. H. Keith, State Normal University, Normal, Ill.
Calvin N. Kendall, Superintendent of Schools, Indianapolis, Ind.
John R. Kirk, President State Normal School, Kirksville, Mo.
W. H. Kirk, Superintendent of Schools, East Cleveland, Ohio.
Henry E. Kratz, Superintendent of Schools, Calumet, Mich.
Maria Kraus-Boelté, Principal Kraus' Seminary for Kindergartners, Hotel
San Reno, Central Park, New York, N. Y.
Ossian H. Lang, Editor "The School Journal," 61 East 9th St., New York,
N. Y.
Isabel Lawrence, State Normal School, St. Cloud, Minn.
Homer P. Lewis, Superintendent of Schools, Worcester, Mass.
Livingston C. Lord, State Normal School, Charleston, Ill.
Charles D. Lowry, District Superintendent of Schools, Chicago, Ill.
G. W. A. Luckey, University of Nebraska, 1439 R. St., Lincoln, Neb.
Herman T. Lukens, State Normal School, California, Pa.
E. O. Lyte, President State Normal School, Millersville, Pa.
John A. MacVannel, Columbia University, New York, N. Y.
Frank A. Manny, Superintendent Ethical Culture School, 33 Central Park
West, New York, N. Y.
David R. Major, Ohio State University, Columbus, Ohio.
William H. Maxwell, Superintendent of Schools, New York, N. Y.
Arthur M. McCallum, Superintendent of Schools, Austin, Tex.
W. J. McConathy, Principal Normal School, Louisville, Ky.
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THE SIXTH YEARBOOK

OF THE

NATIONAL SOCIETY FOR THE SCIENTIFIC
STUDY OF EDUCATION

PART II

THE KINDERGARTEN AND ITS RELATION TO
ELEMENTARY EDUCATION

THIS YEARBOOK WILL BE DISCUSSED AT THE LOS ANGELES MEETINGS OF
THE NATIONAL SOCIETY, MONDAY, JULY 8, AND
WEDNESDAY, JULY 10, 1907

CHICAGO
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THE SIXTH YEARBOOK

OF THE

NATIONAL SOCIETY FOR THE SCIENTIFIC STUDY OF EDUCATION

6

PART II

THE KINDERGARTEN AND ITS RELATION TO ELEMENTARY EDUCATION

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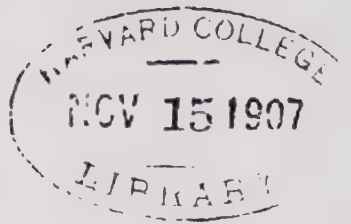
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SECRETARY OF THE SOCIETY

THE SUBJECT OF THIS YEARBOOK WILL BE DISCUSSED AT THE LOS ANGELES
MEETINGS OF THE NATIONAL SOCIETY, MONDAY, JULY 8,
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Manfred J. Holmes

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PREFACE

One most striking phase of current educational history in the United States is the status of both theory and practice of kindergarten education and its relation to elementary-school education. It is universally accepted that the law of unity and continuity applies to the development of human beings as truly as to any other forms of life; but educational practice is slow to adjust itself to educational theories even after such theories have become permanently established by scientific investigation and criticism. A bald proof of the truth of this statement is found in the relation of kindergarten education to the first years of school education. The problems and conditions involved in this relation have been carefully studied, and the results are here offered as a contribution to the solution of one of the most urgent problems in American education today.

This *Yearbook* is published with the hope that it will stir kindergartners, primary teachers, and supervisors to renewed thought and study; that thus they will more clearly define their common problems, develop more mutual sympathy and appreciation, and become better able to co-operate intelligently and effectively in their great work.

The writers of this *Yearbook* are peculiarly and eminently well fitted to speak on their respective phases of the problem under consideration.

Miss Harris, to whom are due the origin and execution of the plan, has a national reputation in this field of education. She has conceived and carried out the plan under the advantage of a broad and accurate knowledge of needs, conditions, and persons.

Professor Kirkpatrick stands close to the head of the list of careful and trustworthy students of childhood and the whole field of education.

The paper by Mrs. Maria Kraus-Boelté is of much historical value, coming as it does from one who has been working for upwards of a quarter-century for the spread of the kindergarten in the simplicity and earnestness which characterized Froebel's own demonstrations of his idea. A link is found here which unites the kindergarten of today in this country with that of Froebel more

than fifty years ago in Germany. The welcome which the kindergarten received in the United States among people interested in education and social progress is largely due to its introduction by persons of such culture and sympathetic insight as are possessed by Mrs. Kraus-Boelté.

This paper reflects the educational teachings of Froebel as he enunciated them, without the accretions or the modifications of recent years. For this reason, one finds here a sympathetic and intuitive presentation of the claims of childhood; and of the means prepared by the founder of the kindergarten for encouraging creation and discovery, with such directions for their use as Froebel deemed essential to promote "willing obedience," order, and freedom in the life of children.

Miss Hill, Miss Mills, and Miss Vandewalker, together with a few others, stand for the newer developments of the kindergarten and its organic connection with the primary school. They believe in a *progressive* ideal of life and education, and, therefore in a progressive adaptation of institutions to the needs of life as new wants appear or as old wants call for satisfaction in a higher degree.

The present *Yearbook* does not complete the study. It will be supplemented by a careful, detailed study of conditions, possibilities of improvement, and ways of bringing about such improvement, so that both kindergarten and primary school may more nearly make their maximum contribution to the education of children.

M. J. HOLMES

THE SIXTH YEARBOOK

I

INTRODUCTION

ADA VAN STONE HARRIS

Assistant Superintendent, Kindergarten and Primary Schools, Rochester, N. Y.

The aim in the preparation of this Yearbook has been to bring before this Society, for careful consideration, the purpose, value, and scope of kindergarten education as the basis of our educational structure. It is viewed from the standpoint of the psychologist, from that of the student and teacher who first received the kindergarten message from Keilhau under the instruction of Frau Froebel, and from that of kindergartners whose view-point has been modified because of training, conditions, and environment; also from the point of view of one who has watched and worked with the child beyond his kindergarten period, and thus can value its influence upon the future stage of educational work.

BASIC PRINCIPLES AND EDUCATIONAL VALUE OF THE KINDERGARTEN

The principles which underlie the kindergarten work are universal, fundamental, and absolutely a part of all that is good in educational processes from the beginning. That the vital principles of education should prevail in both the kindergartens and the schools, and that the application of these principles to the great institutions of learning, so that it shall be an unbroken circle, and that the development of our children may be harmonious and continuous, and the chain of impressions perfect and unbroken, is the essential problem in education.

More than any other educational movement of the century, perhaps, the kindergarten, derives its validity from its recognition of a basic philosophy. It exists that the child, every child, may have life and have it more abundantly; that the community may be elevated, the race improved.

Dr. Hailman ably defended the kindergarten when he said:

It is not a mere ingenious contrivance, invented for the purpose of amusing little children instructively, and of relieving the indolent or overburdened mothers of troubles and embryo sufferings, but a plan of education that has its roots far down in child-nature, and that shelters beneath its branches strong, ripe men and women. It is not a mere cunning invention between the nursery and the school, intended to train up the raw material for the wisdom factories; but a full scheme of education that is to lead the human being from birth to maturity in the road of a wise and useful activity to the goal of true happiness. It recognizes that every child has a threefold nature. He is body, mind, and soul.

The child's early life is in a small circle. With new observations and new experiences the circle of his life steadily widens.

For a few months the child hardly leaves the arms of the mother; then he seeks his companions in his brothers and sisters, or in the objects and animals about the home. Later the neighborhood furnishes a broader field; he is eager to go to school for the broader life he finds there; the kindergarten, the school, the college, all come in their turn to minister to his broadening life. The thoughtful teacher of little children today recognizes that every child has in him powers, possibilities, and capabilities that are his alone, and differing in a degree from those of every other child, and thus aims in his work to minister to the life of his pupils, that he may cause them to live more broadly, more richly, and more abundantly.

Probably no one factor in education during the last quarter of a century has been so potent in the advancement of teaching and the training of children as the kindergarten. It is safe to assume that every grade of school has shared in the new life. Courses of study from the primary school to the university have been recast under the kindergarten influence until the whole purpose of public-school education today is to fit the child to play his part in the various institutions of social activity.

To occupy space to discuss the physical, mental, and moral aspect of the play in the kindergarten, of creative activity, of individual development, of the sociology of the kindergarten, or its plan for a natural and logical development of those faculties used in the school-life—actual and ideal—would be taking time to emphasize what all are fully familiar with, and to repeat much of what is contained in the following chapters.

As an introduction, it may be wise to briefly review in what respect the kindergarten prepares the child for the primary school.

The kindergarten is pre-eminently a school of observation and experience, and so gives vital meaning to the facts and events which the child's first books record.

The child's contact with things, his observation of the aspects of nature and the occupations of man, the habit of tracing and observing the processes and relations of both, are the best foundations for profitable use of the simplest reading-exercises. Furthermore, the kindergarten teaches the child good literature, and believes in biasing the child's literary tastes. The poems and stories are carefully chosen, and should cultivate not only the taste, but the imagination, and fill the child's mind with thoughts that ennoble and uplift. The expression of thought in the form of spoken language is also a very large part of kindergarten training. The children are encouraged to tell what they have observed, or made, or done; to repeat stories related, and to recite memory gems and rhymes.

In the kindergarten the child gets his first training in mathematics; he manipulates objects and is stimulated to observe simple numbers, their relations and combinations. He counts objects of the same kind, and makes his own numerical discoveries. He handles and constructs with divisible objects (the kindergarten blocks) and gets some idea of simple fractional parts.

The rudiments of art education in the kindergarten are begun through brush-work, paper-work, cardboard construction, clay-modeling, and stick-laying. To construct simple but harmonious designs and objects; to combine carefully chosen colors; to produce with clay objects in nature; to illustrate with pencil and brush poems and stories, thereby cultivating the imagination; to invent wholly original forms—all these are daily exercises of the kindergarten, and lay the best foundation for art instruction.

The nature-work and observation lessons of the kindergarten connect directly with the teaching of natural science, and the first simple lessons in geography. Plants and animals in the child's surroundings are noticed, talked about, cared for; the sun, moon, stars, light, clouds, wind, water, rain, snow, are observed. Thus the children learn to regard nature's forms and processes, and begin to think about the relation of things.

The songs and games of the kindergarten, aside from their

supreme value in the development of mind and heart, are the beginnings of more systematic physical training in the grades.

In glancing over these requirements of the child who has left the kindergarten and has actually been taught nothing in the ordinary acceptance of the word, we find that he has worked, he has experimented, he has invented, he has compared, he has reproduced—"all things have been revealed in the doing, and productive activity has enlightened and developed the mind."

The time spent in the kindergarten, while not showing immediate results in the ordinary mechanics of school-life, should show far better results in the development of his character and intellectual power.

Froebel's chief aim was character-building.

Against the self-seeking system of schools the kindergarten protests in the most practical manner, for all its methods are adapted to develop feelings of kindness, of helpfulness, of sympathy with and respect for others. No one child is encouraged to do better than another, but each is stimulated to do his best. "Right feeling is necessary for true thinking; it is only when the heart is joyous that the intellect does its best work. The child depressed by discouragement, burdened with fear, wounded by injustice, or hungry for love, does not thrive either intellectually or morally;" and the first aim of the kindergarten is to see that he is happy.

CO-ORDINATION OF THE KINDERGARTEN AND PRIMARY SCHOOL

In the problem of a harmonious co-ordination of the kindergarten and primary school the observer has often encountered, on the one side, the zeal without discretion, or literal formalism, among kindergartners; and, on the other, the dogmatic prejudice of long-established custom. Here, as everywhere, "the letter killeth, the spirit maketh alive."

To be a true follower of Froebel in practice one must, like that great educator, get a complete view of the scope and function of education itself, and a clear-sighted, philosophic knowledge of child nature.

No thoughtful believer in Froebel's doctrine will claim for a moment that Froebel's exposition of his own methods forms the end of all real kindergarten work. Froebel expounded a great, all-

embracing doctrine of education, and under the very force of circumstances presented a method which he believed would and should be constantly developed higher and higher as circumstances permitted.

In the kindergarten, as in every other department of education, life means growth; and growth implies keeping pace with the advance of scientific, philosophical, and sociological discovery in the field of humanity, and skill in adapting such newly discovered truth by wise modifications of kindergarten methods in the interest of the child's best development.

The linking-together so that the chain of educational development may be strong and sure implies that in the kindergarten we shall find no formalism, no dwelling on dry facts, no set formulas; the threefold nature of the child—physical, intellectual, and spiritual—has full scope for healthy, natural, unrestricted development and expression.

With the kindergarten as a basis of our educational structure, the tendency is more and more to live and work with the children; and, instead of simply furnishing them a store of knowledge to develop the forces within them, to give them power to think and to do, and to teach them how to live.

Right living is the end of education. Power to think, power to do, the development of strength and beauty of character, are the most desirable results our schools can produce; all true education centers in the individual, and develops that personal force and power which best fits for successful living and individual usefulness in life.

The aim and atmosphere of the kindergarten and the modern school have much in common. In both the children are active, busy participants in the work that is going on.

Too many of the children who enter our primary schools at five years of age are subjected to a discipline and curriculum totally unfitted to their years, which results either in blunted sensibilities or in arrested development.

The day is past when the school existed for the development of subject-matter according to the caprices and whims of various individuals. "The education which develops good citizens and loyal members of the community aims at something more than the mere

imparting of facts; it must create ideas, help to strengthen the will, and prepare the child to take his place as a unit in the social whole." Making the child capable and desirous of living to this end is to lead him into a keen appreciation of the highest forms of civilized life—viz., the family, the state, the church, industrial and civilized society—and to make him a self-respecting, self-governing, and helpful agent of these same institutions. He is thus enabled, through social and civic selection, "to add to the experience of mankind, to reclaim new things from the mysteries which lie beyond man, and to make more perfect the existing human national institutions." The child is the *center* of development for the real school as for the kindergarten, and is no longer regarded as so much material to be "modeled after a fashion," but rather as a spiritual being full of the possibilities of development, if his treatment be in accord with the laws of his being.

In the *ideal* school the community spirit of the kindergarten is still carried out, and we find the school organized for the general good, to which each pupil is a contributing member. Such classrooms have the sunshine and atmosphere of a cheerful home; the appearance of busy workshops, in which each pupil is an interested workman for the love of the work, earnestly performing every duty with due regard for the rights of others, looking to the teacher only for direction and advice. In the school where the kindergarten is a vital part of the system the pupils work independently of the teacher; her chief duty is to train the child so as to enable him to gain desired information for himself. The value of all school-work depends largely upon the spirit with which it is carried on. "The spirit of the class is the surest criterion of the value of its work."

The highest type of school has for its ideal a community life, in which its government, its study—in short, all its movements—tend toward the realization of the highest and best physical, mental, and moral life of each individual and of the whole; a school in which the end and aim of all work on the part of teacher and pupil should be to fill every minute of every day with the best possible moral action.

All study, all school-work, moving steadily toward one ideal under the suggestion and hearty co-operation of each individual in the school, cannot fail to open new avenues of thought and discovery, to develop principles and to elaborate methods.

The correct theory of our educational system should be that the primary and kindergarten are one institution—simply a succession of grades developing naturally. The same spirit should prevail, and to a degree the same methods. As children advance there is a gradual change in the tools used, but the fundamental ideas of all the primary grades are the same—the development of the child. Freedom, both spiritual and physical, for the children should be the aim of every teacher.

The linking-together of kindergarten and school so that the development of our children shall be harmonious and continuous, and the chain of impressions perfect and unbroken, so that the community life of the kindergarten may prevail throughout, signifies that more knowledge, wisdom, tact, ingenuity, forethought, and earnestness of purpose are required of the teaching force over our country today than ever before.

The kindergarten stands for two things above all else—the community idea and the laboratory method. When we speak of continuing the kindergarten work through the grades, we mean kindergarten principles, not kindergarten material; we mean that the sweet joyousness of the kindergarten life, its activity, its interests, its community life and laboratory method, shall go on.

In schools where the kindergarten principles prevail, the pupils in the primary schools are divided into two or three groups for the purpose of study and recreation. These groups are organized so as to bring each child where he can do his best work, neither discouraged by those too far in advance nor made listless by tasks too easy to call forth his best effort. By the proper grouping of her pupils, the teacher finds the problems of discipline and good order reduced to the minimum, for each pupil in the grade is actively employed. While one group of a dozen or more is reading to the teacher, another is busy at the desks preparing an arithmetic lesson, and still a third is at the board having written work. Or, in a younger grade, one group is doing constructive work assigned by the teacher at the sand-table, or brush-work at the occupation table, and another is writing at the board what has been gained from a previous reading-lesson, while the teacher is free to give individual attention to the absorbed little group of learners who are reading.

A fundamental doctrine of correct pedagogy as applied to all

teaching is the law of growth through self-activity. But not all activity is educative. Mere doing something does not give growth. The something must be worth doing and done in an educative way. I have seen many a teacher satisfied so long as her pupils were actively engaged in making unintelligible pictures to illustrate something of little consequence, writing words or sentences twenty or thirty times, sorting colors, folding papers, etc. These activities may be of great value as means to an end, when used in proper connections, but as ends in themselves they are a waste of time and energy.

"That is an educative act which gives the individual power to do a new thing worth the doing, or to perform an old act more perfectly. It is supreme effort within the range of one's ability which gives growth."

Two of the greatest weaknesses of our public schools are, first, a failure to realize to the *full* the organic power of the recitation with the group; and, second, the failures (in a degree) to secure independent and persistent study and work from pupils. The school, with its elements and necessary processes, is the one *great* opportunity to teach through a concrete example all the institutional virtues. Here the child should first learn to co-operate on a large scale with his fellows in organized effort. The school should furnish the pupil with opportunity to observe the advantage which comes to him from the presence of the other pupils—opportunity to observe the necessity for the orderly respect for the equal rights of all.

Not all activity involves supreme effort, or any effort for that matter. What a child does automatically is done outside of his consciousness, beyond his horizon, and without the function of his personality. Automatic activity is not educative. The child may do a thousand acts that bring no mental response, no new mode of action, nor greater skill in those already acquired.

A great deal of school-work, primary work especially, is absolutely a waste of energy because it is not educative. A large part of the busy-work of the primary grades cannot stand the test of educative value. It is not merely so much performance with material. Much of the so-called teaching is a waste of energy because it resolves itself into "lesson-hearing." To do no more than to hear a recitation is to have failed.

To quote from a well-known kindergartner:

The kindergarten which is not inspired by Froebel's spirit stands out in sickening relief as a warning example of the wretched results to which the idea may be carried in the hands of a machinist. But the difference between primary schools is just as great, only, unfortunately, we have become used to it, and the kindergarten, being "under fire," so to speak, must be absolutely ideal in its perfection, or it is ruthlessly held up to scorn.

All educational philosophy maintains, and modern psychology has established the fact, that a child's development falls into well-marked stages, each of which has characteristics of its own and each requiring its own mode of treatment. The kindergarten develops the first of these stages.

The old idea of education, and in many instances the present prevailing one, is the idea of quantity, pedantry—so much actual spatial work must be done, so many stages studied, so many lessons learned, and so many books gone over and finished, so much marking to register quantity alone.

The ideal standard for every school should be quality, not quantity; process, not product; culture, not acquirement, in order that the child may leave school a useful citizen. The true purpose of the kindergarten has been to fit the child to enter upon the relations of life. To this end he has been taught self-control, obedience to law, justice, respect for the rights of his mates, and all those virtues which will, when put into practice, render him a respectable, useful member of society. These virtues planted in the kindergarten must be carefully nourished and made to grow in the primary school.

SUMMARY

The kindergarten aims to establish an initial understanding between the home and the school—an advantage to the school. It affords an opportunity to hold back children to a time when they are at a point of maturity when the work of the primary school should commence. It often is difficult to make parents understand the wisdom of postponing the beginning of school-life after the child is of school age. A year lost at five or six may well be two years saved later.

The kindergarten aims successfully at putting the little child in possession of every faculty he is capable of using, and at giving him the wish to learn and the power of teaching himself.

The kindergarten offers the child experience instead of instruction; life instead of learning; a miniature world, where he lives, grows, expands, and learns.

The kindergarten stands for something just as definite and necessary in the life and development of the child as does the primary school. They are one in aim, differing only in means and efforts; the kindergarten using such materials and methods as are adapted to children of that age. There should be no abrupt change between the kindergarten and the first grade, any more than between any other two grades of school.

The need of a closer connection between the kindergarten and the school over our land is acknowledged—"a consummation devoutly to be wished." We all too frequently hear that this union will fail of realization till the primary teacher has had the advantage of a full kindergarten course. A knowledge of Froebel's principles and their application is most desirable, nay a necessity, for every teacher; but that is not enough. The kindergartner must help to bridge the gap by gaining a clear knowledge of and a keen insight into the work that follows here, and of the relation of each part to the other. There should be no fetishism in the kindergarten, but always a study of the children with a view to their development, not a development of material.

No kindergartner should object to the term "teacher," when applied to herself, as if her work were apart from all other educational forces; but when kindergartner and teacher have a common purpose and spirit, the unity in education for which we are working and vaguely yearn will come to a realization. As we come into a clearer understanding of the work of each by the other, as to the purpose, spirit, and end to be reached, then we all, the kindergartners and the grade-teachers, become teachers in the highest sense of the word. We need constantly to rise on "stepping-stones of our dead selves" to higher things, by seeking for a clearer understanding of the general principles of education, by a more intelligent appreciation of Froebel's thought and of its application to the child, by a broader, sweeter, and more catholic spirit toward all our allies, and thereby to recognize the true relation of the kindergarten to all other departments of education.

II

THE PSYCHOLOGIC BASIS OF THE KINDERGARTEN

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EDUCATIONAL IDEALS AND EDUCATIONAL PROGRAMS

A sharp distinction should be made between educational programs and educational ideals. Ideas of education, like ideas of what life is and means, are gained from experience and thought, not from special experiments and tests. They are best formulated, not by the scientist, but by the poet, the prophet, the philosopher. Their truth is determined by the completeness with which they satisfy the souls of men; and those ideals which most fully satisfy the inner nature of all men in all ages are most valuable.

An educational program, on the other hand, is an attempt to realize ideals of life through certain processes. In this field the test of truth is not whether the statement of the program appeals to any man or all men as satisfactory and logical. The poet, the prophet, and the philosopher may make lucky guesses as to the results of the proposed program, or they may miss the truth even more completely than a commonplace ignoramus. The test is here not the subjective satisfaction that the program gives, but the more objective results of influencing the physical and mental activities of human beings by the actual use of the program. The results of an educational program must therefore be determined by psychological principles, and tested by observation and experiment, as are facts of other sciences.

Many of the errors that have been made in educational practice in the past, that are being made now, and that will be made in the future, are due to the fact that the results of subjective thinking about educational practice have been accepted without being tested by careful objective observation and experiment. The error and harm of this tendency have been especially great in the kindergarten and in primary education. An adult who has observed his own learning processes and development can form some idea of the processes

in other adult minds, but just in proportion as his mind is highly developed before he studies closely those processes will he be likely to make out a program for children that is unsuited to their less developed forms of mental activity. It may be that the clearer his ideal of what man should be and the clearer his idea of what the child is, the more will he try to take what seems to be the logical method of most surely and quickly changing the child from what he is into what he should be as a man. As we shall see, Froebel was especially subject to this danger.

FROEBEL'S CONCEPTION OF EDUCATION

Whatever I may say of the psychology and the educational program of the kindergarten as planned and carried on by Froebel and his followers, I have nothing but admiration for his general conception of education. He did not originate everything that is good in his conception, nor has he stated the whole truth clearly and in detail. He saw the same deep truths of life and growth that have been seen more or less clearly in one form or another by the great thinkers of all time. I know of no one, however, who has seen so many of the great truths of life in their educational aspect and arranged them in such a complete harmonious unity as has Froebel. I am not now speaking of his ideas of primary education, but of his ideas and ideals of the general educational process. These are as true for the man as for the child, probably more so; and the college needs a program in accordance with them even more than the kindergarten.

Froebel also had a marvelous insight into the child-nature and the ideals to be realized in different stages of development; but modern scientific study and investigation are making clear and definite what was obscure and poorly defined in his mind, and revealing many important truths regarding the physical and mental nature of children and the order of development that were entirely unknown to him.

Froebel in his theory of unity and self-activity (how much those words have been abused!) showed a complete grasp of what education really is—a process of inward growth into harmony between self and environment (natural and human) with one's body and soul and with the Source of all being. He realized that each

person is an individual—a unit, and that he can grow only by his own activity, and that the highest form of development can be reached only by action toward ends that seem desirable to him. One may be trained according to the ideas of another; but to be truly educative such ideas must become the individual's own. Spontaneous ideals must also be permitted to arise in the individual's own soul, given expression, and allowed to work themselves out in play and work. These ideas of what education is and should do are so fundamental and universally true that they are to be studied and understood rather than criticized.

FROEBEL'S PSYCHOLOGY AND CHILD-STUDY

Froebel's psychology is the product of a prolonged study of his own nature, of his reading of the philosophy of his time, and of mystical analogies to the processes of nature; hence it is a mixture of profound truths of mental life with unintelligibilities that may with equal reason be classed as deepest truths or as trivial analogies and (in literal meaning) evident absurdities. Its fundamental assumption that the processes of nature are the processes of mind and that the processes of mind are the processes of nature is, in the sense in which he used it, more in accord with the philosophy of the dark ages than with the theory and practice of modern science. Scientists have once for all given up the idea that the laws of nature can be evolved from the mental operations of man. The final test of truth in nature must be objective observation and experiment. In a similar way the truths of psychology must be tested by observing how the mind does work rather than by studying crystals and plants and thinking how the mind must work.

Froebel's theoretical basis of child-study was also not in accordance with modern science. He believed that by studying his own mind he could determine the stages of development of the human race and of the individual child. We now believe that verifiable truth regarding the development of the human race and of children can be obtained only by prolonged and extensive study of the facts of racial and child life. To depend largely upon introspection, as did Froebel, gives no standard or test of truth when individuals reach different conclusions.

Fortunately Froebel observed children as well as thought about how they must develop. His own nature was also in many respects

childlike, and his attitude sympathetic. Probably no single individual ever so fully understood the fundamental and universal characteristics of child and human nature as did Froebel. Yet his conception of a child was in a large measure that of a man in miniature unspoiled by training and tradition, rather than of a creature differing from an adult qualitatively as well as quantitatively. He regarded a child, apparently, as being nearly as self-conscious and purposive as an adult. He apparently did not realize that the unity in the child's mind is not only less in degree than in the adult mind, but that it is probably different in kind. In so far as a child is like a man and his development is like that of a man, Froebel knew him from studying his own development, but in so far as a child has characteristics not possessed in an appreciable degree by a man, and almost wholly lacks some that adults have, he did not know him. He gained much from observing children, but his observations were organized by his theories and used to illustrate them rather than to test or modify them. His observations of the physical development of children were less modified by his theories, and, though good, cannot, of course, be compared with modern studies in completeness and accuracy.

Froebel's theories of human and child-nature are, on the one hand, most profound, inspiring, and illuminating, and on the other, pervaded by vagueness and unjustifiable—even trivial—analogies. The reader who, because of the part that is evidently true and profound, accepts the rest as being true and so deep as to be incapable of clear expression in words soon becomes involved in his mystic system of symbolism, and is forever condemned (or transported, as one may choose to regard it) to his circle of thought. He can go on developing within that system, continually finding illustrations of its truths in his daily observations and in his own life, but he can never get outside of the system, never perceive any new truth of child-nature, but only fresh and more convincing illustrations of truths already formulated or implied in Froebel's teachings.

The results of the study and practice of kindergarten philosophy are much the same as the varying beliefs and practices of a religious system. In the Christian religion, without departing from the life and teaching of Christ as the basis, we have had rigid, body-torturing asceticism, austere, stoical Puritanism, the joyous shoutings of Methodism, the cold logical theology of Calvinism, and the

liberal thought of Unitarianism. In the kindergarten thought and practice there are as many variations, but they are not so great in degree. Fortunately liberal views are gaining ground.

KINDERGARTEN PRINCIPLES

Froebel is one of the few men who have succeeded in constructing a theory of education, formulating principles to be observed, and devising a program—all of which have proved pre-eminently valuable. Froebel's theory of education is valuable because of his prolonged introspective study and reflection upon the meaning of life. His educational program, the kindergarten, is valuable because of his prolonged sympathetic observation of children and of different modes of dealing with them. The faults of the kindergarten are due partly to misunderstandings of his theories, to misplacements of emphasis as to what is of most value, and to slowness in working out new and more effective modes of realizing his ideas. This, I think, most kindergartners will admit. Many, however, will doubtless be shocked when I say that I believe that many of the errors, defects, and failures of the kindergarten are not due to mistakes of his followers, but are inherent in the system and most prominent where Froebel is most faithfully and logically followed.

Froebel's educational program was constructed by taking the results of his observations which were generally good, and modifying and arranging them to fit into a scheme of development by which unity and the other ideals of education (so his introspection and reasoning told him) must be attained. As already indicated, his ideas of child-development were not well founded, and his expectation that the effect of the various gifts and occupations of the child-mind would conform to the principles derived from his own mathematical, analogical, mystical modes of thinking were more likely than not to fail of realization. Yet it is his principles of development that have dominated the kindergarten practice, determining the choice of material, its special educational value, and the necessary order or sequence of presentation and construction.

For example, why are the balls chosen as the first gift? Because the ball is the symbol of unity of life and motion, and because from it all other forms may be derived. These are the chief reasons for choosing the ball and making it the first gift. In explaining to the uninitiated who have not learned to think in symbols, such minor

facts as these are mentioned: "The child easily grasps the balls, finds them pleasant to the touch, and is much interested in them because of the many things he can do with them;" but Froebel and all faithful kindergartners would not for a moment admit that such facts as these are the real, fundamental, final reason for the choice of the balls as the first gift. To kindergartners they are merely incidental facts illustrating to ordinary minds great fundamental principles that guided Froebel in planning the kindergarten. Kate Douglas Wiggin says that the similar balls of different colors "enable him to make his first clear analysis or abstractions, since the color is the only point wherein the objects differ." Is this a theoretical statement, or is it founded on a study of what children know upon entering the kindergarten? Do children who enter the kindergarten have no ideas of form and color, and will they never get clear ideas of them if they do not have this first gift? The other gifts are chosen for similar reasons; e. g., the cube, as the symbol of rest, colored black and white to symbolize the day and night side of life. In the same way is their order of presentation determined and the modes of manipulating them prescribed by the law of contrast and sequence. The occupations are selected according to similar theoretical principles of symbolism and mathematical synthesis.

Froebel's observations suggested to him gifts and occupations to be used, and many of them are admirable in their effects upon the child, but the real reason for choosing and arranging them as has been done is, in the mind of Froebel and his followers, not primarily observed effects, but theoretical considerations. So long as this remains true, kindergartners can progress no more than could the scholastic philosophers who founded all their arguments upon the teachings of Aristotle and the church fathers.

I do not mean that there is no law of sequence, no arrangement of gifts and occupations that is better than another. If there is any uniformity in child-nature at all, there must be some order of activity of the child's mind that is better than others. What I wish to emphasize is that a sequence conceived as natural and necessary by an adult mind like Froebel's is more likely than not to be, in the child's mind, no sequence at all, because he is entirely unconscious of the characteristics upon which the sequence is based. A sequence must be within the child's own mind instead of in that of an adult.

What constitutes a valuable sequence to him can be determined only by his outward manifestation of attention and interest, and by the way in which the activity of yesterday and last week or last year affects that of today in the kindergarten and out of it.

Again, though Froebel emphasized the truth that the child goes through various stages of development, in each of which his treatment should vary, yet he and his followers, like other educators generally, have based their reasons for doing certain things upon the assumption that because a certain kind of training or knowledge will be needed by adults it should be given the young child. There is also a tendency among kindergartners, as among other educators, to judge of the value of educational procedure by the rapidity with which the child is being made over into the likeness of a man, rather than by the perfectness with which he is being led to realize his highest possibilities as a child. The ideal that the child should attain to the highest possibilities of each stage of development before entering upon the next is upheld by Froebel and his followers, but largely ignored in the principles underlying the kindergarten program.

His principle of the use of type forms, both literal and figurative, is based on the thought that the best type form is the perfect form, whereas psychologically and pedagogically the best type form is usually that which is intermediate between the perfect form and the greatest variation that can be considered as being of the same form. His principle of unity applied to education concerned more his own conceptions of unity than the psychological, actual, concrete unity which is shown in and developed by acts of attention and in related activities.

KINDERGARTEN PRACTICE

Kindergartens vary, but not as much as other schools, because they adhere to a common theory and because the training of their teachers is more uniform. In general, they probably give as good or better education for children under five than the average school gives at any other period of life. The *best* primary schools, however, are certainly superior to the *average* kindergarten, and in my judgment, even to the best kindergartens conducted by strictly orthodox kindergartners.

I have not the time, the preparation, nor the necessary egotism

to attempt a complete detailed criticism of kindergarten practice, saying just what should and what should not be done. A few criticisms may be suggested as illustrations of what might be done.

Froebel's principle of having a thing done or a mental state aroused, and then described in words and expressed in action, is often systematically violated by prolonged dictation, premature explanation, and artificial expression. In many kindergartens the children spend so much time in fine work, in carrying out dictations, in the tremendously difficult task of sitting still *and doing nothing* while some child is getting ready for the next thing, that they are nervous and irritable when they go to their homes.

The principles of contrast and mediation of opposites are probably worked out in many ways that never affect the child's consciousness; and the same is doubtless true of much of the symbolism of the plays and occupations. The children are led to want to do what the teacher wishes and what other children are doing by imitation and love for the teacher, but not because the child's own nature demands the doing of those things. Voluntary imitation is also too often required instead of making the conditions favorable and trusting more to spontaneous imitation.

The children are taught to express, but the idea to be expressed and the mode of expression as such are often in the teacher's mind only. Children in the kindergarten are supposed to see things as wholes and to analyze and synthesize as do adults, when probably they often do none of these, but merely note striking features or those connected with some immediate interest or thing to be done.

The gifts and occupations of the kindergarten involve mathematical exactness of perception and expression, rather than the gradually growing definiteness and accuracy of thought and motion that is the normal mode of mental and physical development. Objects in nature instead of geometrical forms for use as gifts and in occupations would probably be a great improvement, as they have been found to be in elementary drawing.

The children should also spend much more time in the open air, in working and playing with plants and animals, and in expressing their feelings and ideas regarding them. Children might be allowed to work and play freely, alone or in small groups, instead of all doing everything together under the direction of the teacher. A much greater variety of stories, games, and songs might be used, and the

children encouraged to dramatize and imitate in their own way stories and interesting activities of people around them, instead of indulging so much in fanciful analogies and the fanciful stock kindergarten games.

Some kindergartens are charged with teaching too much and demanding too much self-control; while others are said to teach nothing and to fail in developing any tendency to sincere effort. A broader, richer kindergarten program seems to me desirable rather than definite teaching and accurate constructions; but interest should be developed of sufficient strength to produce persistent effort until ends are gained. It is not especially desirable that a child of the kindergarten age shall be conscious that he is learning, but that he shall enjoy a varied experience in his stories, songs, and play, and that he get the experience of success in doing things. The fact that he thinks he has succeeded is more important than that he shall have made something that looks pretty or is well made according to adult standards.

HOW TO IMPROVE THE KINDERGARTEN

Slight modification of kindergarten practice in response to such criticisms as are given above is not likely to result in great or rapid improvement in the kindergarten so long as Froebel's authority and system dominate the thought of kindergartners. What is needed is a change of attitude so that they shall be susceptible to non-Froebelian and even anti-Froebelian truths, and will actively search for such truth. A step in this direction has been taken in the kindergarten training department of Teachers College, Columbia University, under the direction of Miss Palmer, formerly assistant to Miss Merrill of New York City.

Something much more radical, however, is needed—nothing less than an experimental kindergarten where the most cherished principles of the kindergarten shall be violated and the results noted; where the law of contrast and sequence shall be ignored and the child, instead of making one figure from another, shall make chaos of the blocks or tablets from which to construct the next figure; where the order in which the gifts and occupations are taken up shall be varied indefinitely; where forms of life shall be made first, those of beauty next and of knowledge last; where, instead of the regular kindergarten gifts, shall be used nuts, seeds, fruits,

vegetables, grasses, and stems of various kinds, together with boards, nails, spools, rings, blocks, etc.; and where an entirely new set of songs, stories, and games shall be used.

Of course, to get definite results one group of children should be treated in one way and another group in another, the results being carefully noted. The children should be observed not only in the kindergarten under these different modes of treatment, but at home and later in the first grade. A very interesting preliminary experiment would be for students to go into strange schools and try to determine by observation and experiment which are kindergarten trained children and just how they differ from other children.¹

Experimental pedagogy is just beginning, and its most promising field at present, I believe, is the kindergarten. When children first leave the home and are brought together in groups is the time when the results of different modes of dealing with them can best be seen and tested.

Probably no better educational work is done in America today than in our better primary schools. Foreigners have noted that they are also very much alike all over the United States. Why is this? I believe it is due largely to the fact that almost every possible method of beginning various subjects and of occupying the time of children at their seats as well as of adding and omitting subjects has been tried in the first year of school where the necessity of reaching certain conventional results is felt less than in the higher grades. Although these experiments have not been formally scientific, teachers and superintendents have observed the results with open minds, and we have now emerged from chaotic variety in primary school work into comparative uniformity. Our primary school of today, it is generally admitted, is immensely superior to that of the olden time and probably to that of any other country.

The progress from logical plans for teaching to being guided by observed results is perhaps best illustrated in the teach-

¹ A little experiment of this kind was tried by the author, in a first grade of eighteen pupils, ten of whom had been in the kindergarten the preceding year, pine needles being used in free and in dictation constructions. A class of teachers who had observed kindergarten work to some extent observed the children while they worked and tried to pick out the kindergarten-trained children. They succeeded in about half the cases; or in other words about as well as if the selection had been made by chance.

ing of reading. We have had the alphabet method, the word method, the Pollard system, and a host of other systems, each of which was shown on theoretical grounds to be the only logical and sensible mode of procedure. Observation of the results of the different methods show that all have merits and defects, and the best primary teachers are now using various elements of these methods that experience has shown are advantageous and least productive of undesirable results. The fact is that if children can be interested in studying printed words a sufficient length of time, they will learn to read no matter how they begin or what system or lack of system is followed. Doubtless some arrangements make the task more easy than others, but the rapidity of the child's progress depends not so much upon the objective case of the sequence as upon the extent to which the system excites and holds his interest in discriminating words.

The chance for determining what is and what is not desirable in kindergarten practice is much better than it was in the primary school, because the children are younger, the kindergarten is not expected to fit specifically for the first grade, and because more systematic experiments and more exact observation of results may now be made. The actual improvement in kindergarten practice may not be so great as it has been for the primary school, because the present kindergarten is better than the old-time primary school ever was. However this may be, the merits and faults of the kindergarten can be determined only by changing kindergarten practice and noting the results.

Doubtless many faithful kindergartners will be afraid to go directly against Froebel's theories of the laws of development, lest the children be injured for life by such procedure. Notwithstanding the confidence they have in the child's nature and self-activity, they have more confidence in Froebel's program for developing him than in the child's own power to select, assimilate, organize, and unify all sorts of experience either systematic or chaotic for his own good. Now, I have more confidence in the child and in the judgment of sympathetic kindergartners in direct contact with him than I have in the theoretical principles stated by Froebel or anyone else. If the children are interested in the work and the teachers can see no harmful results, I do not believe harm will result from any method of procedure that may be adopted. Any procedure that

fails to interest the children or that appears to kindergartners to produce immediate harmful results need not be long continued.

By interest I do not mean mere amusement supplied by someone else; I mean rather the child's enjoyment of what he is himself doing; and I measure it not by its momentary intensity, but by the length of time it continues, the amount of activity it calls forth, the extent to which it leads to other more complex activities and especially the extent to which he carries on that and other activities without the continued stimulus and direction of the teacher. However varied and chaotic a child's impressions and activities may seem to be to an adult, they may be unified in the child's mind by interests that to him relate and unite them.

In some respects it is unfortunate that the kindergarten was so well planned and so successful in practice. It has had no rivals as have the various theories and methods of teaching reading and arithmetic; the only variations have been within the system in the form of different interpretations of Froebel and in details of the program. There has been no opportunity for the good features of several theories and programs to be selected as the fittest to survive as has been the case in primary work. Since such rival theories have not come forth, it is desirable that an experimental kindergarten shall be established somewhere for studying the effects of various methods of dealing with children of kindergarten age. Such an experimental kindergarten should be guided in making its experiments, not by kindergarten principles, but by the best established truths of psychology and child-study, every interest that is prominent at the age of three to five being appealed to; but the final test of the results of the programs must be the effects upon the children.

It is also desirable that kindergartners both when training and in later practice shall spend less time in trying to interpret and apply Froebel's theories of how to develop children and more in observing just what effects are being produced upon the children. The highest possibilities of the kindergarten can be realized only when, without abandoning Froebel's ideals, kindergartners are freed from the authority and tradition of kindergarten theory and practice, and have become as earnest, faithful, reverential, and efficient students of children and of principles of development as they have been and now are of Froebel.

SUMMARY

1. Ideals of education and theories and practices of education are to be judged on a different basis.

2. Froebel's ideas were good; his theories based on his psychology and his ideas of the laws of development are a mixture of truth and error, and the kindergarten practice based on them is a mixture of good and bad.

3. The kindergarten program should be changed radically in accordance with the latest truths of child-development and the results of such changes carefully observed, tested, and compared with the results of typical kindergarten practice that the good and bad of each may be determined and the best of each selected.

III

AN INTERPRETATION OF SOME OF THE FROEBELIAN KINDERGARTEN PRINCIPLES

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FROEBEL'S FUNDAMENTAL IDEAS AND THEIR EDUCATIONAL BEARING

A man who yields his entire being to his ideals, sacrificing every selfish interest to his spiritual tendencies of loving service for his altruistic ideals, the inspired enthusiast whose every thought and word and deed bears the imprint of his devotion to his mission, is a being whom no one susceptible of great and noble sentiments can approach without admiration and awe. Such a man was Friedrich Froebel. No doubt this man was the incarnate union of unusual vigor, with a love almost motherly—a union requisite to constitute a person an ingenious educator of the young and a friend of childhood.

To receive and to return love is to the child an essential condition of full growth and the enjoyment of life and happiness. Froebel had an instinctive feeling of this happiness of the child; and he found the full satisfaction of his desire for love in this communion of his mind with the mind of childhood. This trait of character was the key that opened the character of womanhood in general to the understanding of Froebel and made him the most sagacious interpreter of the wants and the vocation of woman. This is the explanation of the remarkable fact that Froebel's method of education attracted few young men students, and that there is rarely found a true woman who on being introduced to the principles of the kindergarten does not understand them and begin to practice them with an enthusiasm akin to that of Froebel himself.

The difficulty of understanding Froebel's writings in the original is so great that there are few persons who would attempt to interpret his meaning; and the difficulty would be further increased in an exact translation.

Froebel was convinced by experience that education, in order to be fully efficacious, must begin much earlier than at school age;

and he engaged the sympathies of womankind to carry this out. He saw clearly that the education of man must begin at his birth; or, to be quite correct, years previous to his birth. Such an education must necessarily be self-education. Naturally, and almost exclusively, it is found within the power of woman thus to educate herself. Froebel looked upon woman as the true natural educator of man. The conviction that education was the vocation of woman grew to the intensity of a faith in Froebel's mind, dominating his whole being. This faith proclaimed that woman had not a holier vocation—if in fact she had any other—than that of the education of man. And thus Froebel speaks of the training of woman in normal classes for her sublime mission.

Froebel's aim was the advancement of the interests of early childhood and the progress of the education of man in general. With this conviction Froebel stepped out beyond the narrow boundaries inclosing the kindergarten and the school, and began looking upon the whole life of man as a realm in which to render effective the art of the education of man.

Froebel recognized the threefold nature of the child; viz., (1) a child of nature; (2) a child of man; (3) a child of God.

As a child of nature he has a body which unites him with the material world. As a child of man he attains through his senses the power of thought, having that which no other animal has, namely, intellect, mind. As a child of God he has a soul, a spiritual nature apart from his body, and eternal life.

Inner connection is Froebel's chief category; and finally he comes to seek a correspondence between the inner connection of the unfolding faculties of the child and that which exists in nature. Thus we find in Froebel's philosophy of education (1) inner connection between objects of nature, namely, evolution; (2) inner connection between the faculties of the mind, namely, mental development, or education; (3) inner connection between the subjective and the objective, between mind and nature.

The basis of the kindergarten is *organic unity*. Its characteristic process is *creative activity*. The law which brings the means for work and play into a whole is the law of the *connection of contrasts*. These contrasts do not refer to things in themselves, but to qualities common to all things.

Every object in the kindergarten must be considered as a key

to the outer world and as an awakener of the inner world. In other words, each object must interpret the external and rouse all the activities of the child. Hence the following rule: Appeal to the thoughtful nature of the child: (1) to his thought by the suggestive and explanatory word; (2) to his feelings by the association of each play-gift and occupation; (3) to his activities by requiring him to handle, to divide, to reconstruct, to transform, to combine, and to create.

Evolution is the principle in the kindergarten work, all things being developed one from another in progressive stages. All that seems merely play to the child has a definite purpose; and this is true throughout all kindergarten work. The child, by the intended uses of the kindergarten play and occupation means, also develops originality by the exercising of his power of invention. He learns concentration and a willing obedience; by being active his hands acquire alertness in making the many different forms; he learns to use his eyes, to compare, to observe and imitate the things that he sees around him every day; his mind is developed by the constant use to which it is put; and he acquires mental activity by reproducing and comparing forms. Thus, by playing, the child's manual, mental, and moral activities are strengthened; and his character development is considerably advanced.

Kindergarten work without the kindergarten idea, like a body without a soul, is subject to rapid degeneration and decay.

The scheme of Froebel's first kindergarten was "not only to take under its care children under school age, but also to give them occupation suitable to their nature, to strengthen their bodies, to practice their senses, and to keep busy the awakening mind; and in a pleasing manner to make them familiar with nature and man by properly directing their minds to the first cause of all life—God, and to harmony with themselves."

Froebel called his institution "kindergarten," because he held it necessary that a garden should be connected with it, and because he wished symbolically to indicate by this name that children resemble the plants in a garden, and should be treated with similar care. In a letter to one of his pupils Froebel states what he meant by a "true and genuine kindergarten," and compares the kindergarten with the German oak, saying:

In a true kindergarten I seek the same thing that I find in the young oak tree, which was to the Germans of old the symbol of power, perseverance,

etc., and the bearer and harbinger of a higher life. The oak answers the idea of kindergartens, as I understand it. An oak is a tree; and the idea of *tree* is therefore also contained in the idea of *kindergarten*. Persons who hitherto mostly founded kindergartens range them merely under the general idea of "tree;" but as birch trees, fir trees, elder trees, poplar trees, linden trees, and beech trees are all trees, so there are kindergartens which are like the delicate birch tree, or the talkative poplar tree, or the egotistical fir tree, or that have a similarity with the abundant foliage of the beech tree; but none of these are like a young, firmly rooted, symbolic German oak, from which in time would develop a sacred oak grove where the gods dwell, and which would generate a sacred race and people among whom the gods would like to dwell. And for this are required a good and rich soil, suitable surroundings, and persons who in their will and action resemble the oak; who, so to say, are oaks. Without the aid of such people we shall never reach our aim.

The fundamental principles expressed are that the thorough improvement of our educational systems is to be secured by beginning with the life of the individual; that education should assist, but never disturb, a free development of the individual in accordance with human nature; that the general aim of all education is to educate morally free and practically able religious men and women; that the present time requires particularly that education should tend to the formation of character, to develop power of will, and to do what is ideal, beautiful, and sublime—to cultivate the heart.

Froebel's education is the safest foundation for the early education of children, holding within it the leading features of all degrees of higher education; and to adhere to his simple and beautiful ideas based on nature means progress in every direction, even as nature moves on, naturally, but unerringly.

Much of the success of the kindergarten is negative and consists in preventing harm; and its positive success is so simple that it cannot be expected to attract more notice than fresh air, pure water, or the merit of a physician by whose efforts a family is kept in good health.

As never before the fact is understood how detrimentally premature schooling affects the sound development of body and mind, how it destroys all the freshness and pleasure of learning, and how frequently it burdens a whole life with the most mischievous consequences.

The first impressions are verily controlling for all subsequent periods. "Make the bridge from the cradle to manhood just as long

as you can, by having your child a *child* as long as possible. Be not in haste to force your child into premature development by intelligence, or by anything else. Let it be a child, and not a little ape or man running about the town." Froebel writes:

Can you tell, O mother, when the spiritual development of your child begins? Can you trace the boundary line which separates the conscious from the unconscious soul? In God's world, just because it is God's world, the law of all things is continuity, and there are and can be no abrupt beginnings, no rude transitions, no today which is not based upon yesterday. The distant stars were shining long before their rays reached our earth; the seed germinates in darkness, and is growing long before we can see its growth; so, in the depth of the infant soul, a process goes on which is hidden from ken, yet upon which hangs more than we can dream of for good and evil, happiness or misery.

Froebel's book, the *Mother Play and Cossetting Songs*, was written for mothers. From mothers he has learned what he has written. The book addresses itself to all women who have charge of children, and thus represents the mothers, assisting them to the consciousness of their duties toward children, and to a lofty conception of those duties. Froebel follows in this the instinct of mother and child. He exercises the child's limbs and senses by making proper connections with his experiences. These exercises are entertaining for the child, and as the child grows and develops he finds pleasure in the movement of things he may see about him; and Froebel draws these into his "play and song circle," so that the children may be in living familiarity with what is in nature outside of them. With this is always connected the representation of that which is seen by the child, thus satisfying his inborn desire to express his strength, his self-activity; and as imitation and imagination are strong in children, when older they may proceed to represent the actions of creatures and movements of things represented in these songs. Woman becomes here the educator. In watching the many-sided development of the child's character, it will be constantly seen that there arise endless varieties and conditions. Within the child there may be found defect germs, as also slumbering talents, both having chances to develop in later years; and hence it should be the educator's aim to strengthen the good in the child. This book was not intended by Froebel for a practical handbook. In its simple form all are enabled to understand its contents; and

it should be in the hands of every woman so that one of Froebel's principles may be practiced by them; namely, to draw out for themselves from it what may be needed in their family. This would not exclude a better revelation and insight given to them in mothers' classes or conferences.

Froebel's aim was ever that his principles should be rightly understood, and also that these should be correctly practiced in the task of the children's education. He provides for the little child precisely that recognition of a "God-given power" within him in which is contained a power capable of changing the world. The child who starts life with the sense of divine self as the true self is safe indeed. And young girls and simple-minded mothers can understand this.

Froebel becomes ever more understood owing to the thought of the evolution of spiritual life. And hence it will be ever better comprehended that, for instance, the aim in setting the child to work in one or another of Froebel's play-and-occupation means is not to tie the child down merely to the mechanical action, but to put him at once in the right relation to the material (matter) and to the Creator; and not merely as an investigator of the material world. That this correct relation might be brought about, Froebel provided materials exactly fitted to tempt the child to use the same. Thus, the fingers learn skill, and the eyes learn to see color and form correctly; and the senses are pleasantly and skilfully trained.

Froebel insists that by his plan the child is spiritually trained. He also provides for the universal law of symbolization by which everything stands for some idea. The symbology of the occasion satisfies the child's fancy. Further, he insists on the great spiritual law that we can see only what our eyes are ready to see; and that we can know only what we are ready to know; and that we do only what we put our will into.

Froebel constantly asserts that our aim is to have life, and to have it more abundantly. The aim is absolute self-control over self and life, and its affairs. "The kindergarten was created as a protest against that power which would retard free thought and self-expression; and, true to its inherent possibilities, there is scarcely a vital life-interest which the kindergarten does not touch. Froebel's system is the only one in which the details of actual practice are the real outcome of sound psychological principles, and

in their application are continuously governed by those principles. *If ever the practice in its logical outcome should cease to be the distinct expression of the psychology, the plan will cease to be Froebel's.*"

Speaking of the historical (evolutionary) Froebel said: "A new creation must always spring from the old; and that which follows is always conditioned upon that which goes before; I make little children see this through my educational process." The so-called gifts show this in concrete things. Ball, cube, cylinder, and cone are contained one form in the other; and through manipulation Froebel makes this apparent to the little child.

Froebel said: "The experiences of my own life are to me the clearest proof of the length of time which an idea, a thought, needs for development and cultivation."

Evolution, or development, consists not so much in an increase of bulk or quantity in the kindergarten as in an increase in complexity or structure, an improvement in power, skill, and variety in the performance of the natural functions.

In regard to the effects of the kindergarten play-and-occupation means, as wisely and understandingly presented, Froebel says:

No one would believe, without seeing it, how the child's soul, the child-life, develops when treated as a whole, and in the sense of forming a part of the great interrelated life of the world, under the guidance of a skilled kindergartner; nay, even by one who may only be simple-hearted, thoughtful, and attentive. Oh, if I could only shout aloud with ten-thousand lung-power the truth that I now tell you in silence, then would I make the ears of a hundred thousand men ring with it! What keenness of sensation, what a soul, what a mind, what force of will and active energy, what dexterity and skill of muscular movement and of perception, and what calm and patience will not all these things call out in the children!¹

"As the basis of a true kindergarten activity can only be built up upon the reform of family education, and as the kindergarten has not had its beneficent influence on generations by becoming an institution of the community, and has not produced enough well-prepared pupils, so we have not as yet the true, ideal kindergarten, and cannot speak of such institutions as completely carried out."

The kindergarten may be regarded as the "nursery of mankind." This fact speaks in itself for the importance that is attached to the true training of the mother and the kindergartner.

¹ Froebel's *Letters on the Kindergarten*, p. 145.

According to Froebel it is of the highest importance, not only for the religious development of man, but for the expansion of all his faculties, that his education, starting from one point, should follow a progressive course, and should advance toward the goal uninterruptedly without breaks or sudden changes. For nothing is more hurtful to the development of the individual than to consider any stage as detached or isolated from the rest. The periods known as childhood, youth, adolescence, manhood, old age, are but the links of one and the same chain; and consequently the little child, the youth, the man in his maturity, cannot be looked upon as different beings, strangers one to the other. Life in all its various phases presents one complex whole, of which it must be our care to consider the starting-point and the ultimate goal.

Froebel considers each human being as a "part-unit" equipped with talents and powers belonging only to him; and as such he is to be respected. As part-unit the human being is limited to certain degrees of development, and has to subject himself to certain laws. The child also has to subject himself to the order and regulations of the family, the playground, the kindergarten, school, etc.; and neglect means abandoning one's duty. To find the equilibrium—this is the educator's duty.

From this it may be inferred why Froebel laid so much stress upon the idea that the kindergarten play-and-occupation means form a whole, and that each part of it, singly, is to be regarded as a thing by itself. The law of the connection of all things shall govern the kindergarten; and this should be brought about clearly and simply, so that by means of his play-world the child may be led to find his way in the world that surrounds him. Lengthy explanations cannot do this; but the kindergarten materials offer the means; and the law of the connection of contrasts used by the child in the kindergarten is the same as that which governs the world, transforming one thing into another. Thus the kindergarten work, being in the service of education, cannot be the aim and end; it serves as a means to educate the child. Hence the value is found in the influence of the work; it leads to a better acquaintance with and insight into the outer world, the world of the senses, and the connection the things are having one with another. To break this connection would be to lose Froebel's idea.

The better the proposed aim has been understood, the better the

method used and the process followed, the more active part the mind takes in what is done, the higher will be the result. Mechanical imitation is the lowest degree of the series in all steps, while the highest is "free creation" of forms generated in the mind. Between these two there is a whole scale through which the crude work of the hand rises later to a work of art. There is no other way to give to childhood that preparatory education which is needed for life.

Health ought to be the aim of the educator's care and efforts in regard to the child, both moral and physical health.

The child is the product—the result—of the generations which have preceded him; he is the visible link which connects the past with the future; and he bears within himself the consequences of all that has gone before him. In him are the germs which may be developed for good or for evil. The main aim is to try to develop what is good, and subdue what is evil.

Education begins from the birth of the child; and, to be rational, education should consist in a wise employment of the resources to be found in nature; above all, it should not be the instrument of the will or fancies of the educator. To wish to improve on a child's own tastes and occupations or ideas is a puerile and selfish way of contemplating childhood, and sometimes leads to struggles which are dangerous to the character. Simple teachings in direct lessons—an atmosphere rather than a code of regulation—prove the best and surest means for the child's education. The child is not hurried by direct teaching. He is taught by the atmosphere about him. Experience becomes his teacher as in adult life, and his lesson is learned all unconsciously without a perpetual "Do it so," or "Do not do it so." Members of a little community, they adopt its manners and morals.

The games of the kindergarten represent valuable appearances from the life of man, animals, plants, etc. In these games children find opportunity to view life known to them in a new aspect; for instance, representing pigeons and their life. When later seeing the real pigeons and their house again, the children are awakened to look at them with more interest than they would have done without such a game. A live pigeon may be brought to the kindergarten; its walk across the floor may be observed, how it turns its head, closes its eyes, and coos; even the flight of the bird is observed, how the wings spread and move. And in their imitation it will be per-

ceived that the wings remain straight, that there is no undulating motion, no joint moving in the end of the wings. The child's individual development is quickly advanced in such natural manner, and true benefit derived mentally and bodily. In this game the child learns to breathe properly, to move noiselessly, to coo with a low and gentle voice. It is not *that* the child plays "pigeon," but *how* he does it. This applies to all games, play, and work of the kindergarten. If not thus carried out, all games, play, and work would be degraded, would become mechanical.

In the games the child learns intuitively actions and their meaning; and a development of the senses of form, comparison, etc., takes place. And in order to be successful, the child has to subject himself in willing obedience to the rules of the game. If the child were to grow up without such willing obedience to rules, his freedom would be just as much endangered, as if he had no freedom whatever. The games occupy a distinct place by themselves. Plays are mentally spontaneous. For the games there should be simple music and correct action.

In Froebel's methods ethical culture occupied at starting, a large place. The ethic faculty is one of the first to unfold in the mind of a child; hence, its training and culture have immediate claim on the educator. The fact that faculty is there is sufficient to show that it is one of the essential roots by which means the child's nature receives nourishment needful for his perfect, healthy, and vigorous growth.

Stories are the child's first introduction into the great world of the ideal in character and life. The imaginative faculty of the child's mind should be dealt with very carefully. All stories should have an educative value, rather than instructive.

THE GIFTS AND OCCUPATIONS DISTINGUISHED

Froebel's play-means of the kindergarten consist of two groups, the Gifts and the Occupations. They constitute one united whole, each one the outgrowth of the previous, bringing about the inner connection and relation of the law as utilized by Froebel; and in this relation both gifts and occupations become a means for the child's development through the application of this law by self-activity.

The difference between gifts and occupations is the following:

The gifts are derived by analysis from the solid, while the occupations are evolved by synthesis from the point. Furthermore, the different gifts, after having been changed into the greatest variety of forms, at the end of the play take the original form, which is found entirely unchanged; whereas in the occupations there is transformation of the material itself, which cannot take the original form again.

There is this wonderful unity of design which characterizes Froebel's given material, and his natural, simple, child-befitting plan, thought out so logically and beautifully. The chief aim of these educational means is the self-development of the child entire.

The gifts and occupations are meant to aim at giving the child impressions of form, size, direction, motion, color, etc., leading him to analysis and construction, to development; i. e., to the exercising of the inner and external senses of form, number, size, etc., in order to assist the exact perception of objects, their properties and sizes, placing the children in a condition to translate immediately these appreciations by external representations, and, by so doing, strengthening the faculties of observation. Thought and originality are stimulated, as also investigation, which, if not satisfied, would eventually lead to destructive tendencies. The elemental powers are developed to logical thought by means of logical action; and the child is thus assisted to give outward expression to his inner thought. Further, the aim is to stimulate attention, comparison, love of order, and mutual helpfulness.

Within these gift-and-occupation means is held a power of suggestion for the utilization of the play-spirit. The ear hears sounds, language, music; the eye-sight is trained to distinguish better, more minutely. The child's mind is being filled gradually with images of actual life, and the intellect is built up on this basis. This leads to comparisons and establishes the idea between cause and effect, between object and language, and between the concrete and the abstract—a valuable preparation for after-life.

THE GIFTS AND THEIR USES

Froebel gives experience instead of instruction; he puts action in place of abstract learning. His kindergarten gifts are nothing but the working-out of his theory. The ball of the first gift is the primitive form from whence issue all the others. This gift consists

of six worsted balls, each ball having one color of the rainbow, and represents the elements for intuition; form, color, motion, direction, material—all gained through playful exercise.

The ball on a string illustrates swinging motions, revolving motions, pulling and pushing motions, hopping motions. Grasping and catching the ball strengthens the muscles of the hand and arm; and the eye is educated at the same time. The games with the ball in the open air excite the healthy action of the entire body. They are the best teachers of gymnastics for the child; as, for instance when the ball hops the child may hop. Swinging the ball on the string the child may not only play "tic-tac," like a pendulum, or "ding-dong," like the church bells, but he may receive ideas of "here-there," "front-back," "right-left," "up-down," "slowly-quickly," "near-far," etc.

Whatever is expressed in the playful instructions should be articulated accurately and distinctly, in order to develop the organs of speech. If children are taught to speak well before they learn to read, they will not require special instruction in the art of reading with expression.

To catch the ball, all the child's energy is required. The mind's development must be assisted in its first stages.

The second gift, which consists of four bodies—the sphere, cube, cylinder, and cone—represents contrast of form, and addresses the intellectual rather than the physical nature of the child. Revolution upon the axis of each body gives intuition of the inner relation of these bodies.

With the child, its first play-object should be succeeded by others which give the earliest opportunity for instituting comparison. In the cube of the second gift Froebel offers the primitive form of crystalline action. The two contrasts, sphere and cube, are connected by the cylinder and the cone—which participate in the qualities of the two other forms. By revolving these four fundamental bodies the child discovers the relation that exists between the sphere, cube, cylinder, and cone. To these four bodies can be retraced all forms and existing bodies. And this second gift thus constitutes the pivot of the play-and-occupation materials proposed by Froebel. "Innocent plays" are connected with the use of these bodies.

The third gift is a cube $2 \times 2 \times 2$, divided once in each direction, resulting in eight equal smaller cubes. Here, as also in the follow-

ing three building gifts, both the intellectual and the physical nature of the child are exercised.

Without a division or resolution into its component parts, the examination and thorough knowledge of any substance is impossible. The study of material knowledge serves as a basis for the study of the intellectual things; and divisions arbitrarily chosen leave no clear idea in the mind. It is therefore indispensable that all divisions be regular and conformable to "law," even as nature. In the third year the child endeavors to investigate the interior construction of things. This was what suggested to Froebel the divided cube as a plaything; and it is designed to foster the spirit of investigation in the young mind, while at the same time it stays the destructive element. The cube is separated, and its several parts are again united so as to form a new whole form. Little stories, comparisons, conversations, aid the child in the expression of his own ideas. The child divides the cube into two, four, and eight equal parts, offering a means by which the child may acquire mathematical conceptions. Such forms are, therefore, termed forms of knowledge; they correspond to the forms of knowledge in logic. For instance: The eight cubes can be placed in line, and the one-inch checkers—which correspond to the part-cubes of the third gift—will be of great assistance for the guidance of the child. Placing the eight cubes in line, they may be connected, subdivided into halves, quarters and eighths.

The exercises may be varied in this manner:

1. Make the cube; take the two upper front cubes and place them upon the two upper rear cubes, and the form represents a miniature chair—for father or mother.
2. This chair may be divided—resulting in two chairs.
3. These two equal chairs may be placed back to back—resulting in the form of a house, etc.; always one form being the outgrowth of the previous one until finally the cube has been formed again.

With each of these forms some instructive remarks may be connected, or some truth inculcated.

Rhythm can be taught by means of simple symmetrical forms. Their object is to cultivate the sense of the beautiful and the esthetic—the result of order and harmony. These forms train the eye to see quickly and distinctly, and the feelings to reject what is unsightly, inharmonious, and untidy.

These forms are again brought about in continuous steps, having a solid center of four small cubes, and revolving the other four cubes symmetrically around this central square, adhering to the "law of opposites;" i. e., if, for instance, an upper cube is moved to the left, the lower corresponding cube is moved to the right; if the left-side cube is moved forward, the right-side cube is moved toward the rear; etc. The child exercises his mental powers and learns to express himself. After each exercise or sequence the child is left to the full freedom of using the blocks.

The basis of the kindergarten gifts is mathematical; they illustrate successively the solid, the plane, the line, and the point. The progress from the undivided bodies to separate and independent elements further on awakens the mind.

The earlier gifts are rich in suggestions, while the derived gifts extend the former range. The object pursued is to aid the mind to abstract essential qualities of objects by the presentation of striking contrasts, and lead to classification of external objects by the presentation of typical forms. They illustrate simple truths through simple application, and stimulate creative activity. The natural tendency of thought is thus accelerated by carefully abstracting from material things their essential qualities.

Each gift throws some distinctive attribute into relief. In the first gift there is contrast of color; in the second gift contrast of form is found; the third gift offers contrast of size; the fourth gift offers contrast of dimensions; the fifth gift gives contrast of angles and number; the sixth gift presents proportion of different parts in respect to size and facility to inclose space.

All exercises with the gifts can be grouped under three distinct heads, viz.: (1) forms of life—i. e., objects we see around us; (2) forms of beauty or symmetry; (3) forms of knowledge or mathematical forms.

The thinking, searching, parting, and dividing processes of the understanding—that is, analyzing—should be preceded by the taking-apart—that is, analyzing—of the solid bodies; for an arbitrary division can never lead to clear representations. The next step is the transition to the plane given in the thin wooden tablets in the form of simple mathematical ground-forms.

With the tablets, the seventh gift, the child can no longer represent real objects, as was done with the building-blocks, but only pic-

tures of these. The shape of the tablets is of two kinds, square and triangular. The latter are again divided into four kinds of tablets, viz., right-angled isosceles triangles, equilateral triangles, right-angled scalene triangles and obtuse-angled isosceles triangles.

The forms made with each kind of these tablets are again grouped under three heads; life forms, symmetrical forms, and forms of knowledge. The child proceeds slowly, and connections are made with objects surrounding him and with his experiences. The combinations of forms in each series are numberless; but the elementary forms are few in number and limited in variety.

The connected and disconnected slats of the eighth and ninth gifts render the contrast of form even more striking by the child's self-production of the same. These slats represent partly the surface and partly the edge of the forms of the previous gift. The connected slats, by means of rivets which connect the ten equal slats, can be shifted into various outline forms, grading the process by number and in the slat-interlacing of the ninth gift single slats are interlaced into a variety of forms. These gifts form a starting-point for becoming acquainted with angles and the direction of lines; parallel lines are distinctly seen, and geometrical outline forms are easily derived by the child's own effort.

With the single disconnected slat not only direction of lines are playfully reviewed, but the slat can be used for measurement; the elasticity of the pliable slat offers many happy exercises in regard to sound and rhythm; while the interlacing of many slats leads the child again necessarily to the exercising of the law of opposites, to the appreciation of forms of use and forms of symmetry. It is the perfect simplicity that makes the play-work so clear and strong.

In the tenth gift, stick-laying, the little sticks from one to five inches long represent the embodied edges of the cube, carrying the child another step in advance from the concrete to the abstract. The sticks form the material for making outlines of objects, sketching outline-forms with embodied lines. The child receives at first only one stick, gradually increasing the number, which are held together with a string. In opening such a little bundle the child instinctively divides the bundle of five or six or ten sticks into five or six or ten units. The possibility of these sticks in the development of forms of life (forms of objects surrounding child-life), forms of symmetry, and forms of knowledge is capable of worthily engrossing the

maturer mind and intellect. The imagination of the little ones is a factor without limit. Its material can lead the child to the different avenues of observing wooden objects and their uses, as also to nature whence the stick has been derived. The network of squares on the kindergarten tables is here again a valuable guide. The sticks are admirably adapted to teach numbers and the rudiments of the rules of arithmetic.

The letters of the alphabet can also be laid and may be combined into short words, if the child is sufficiently advanced to do so of his own accord. Froebel gives an excellent example of this in his letter to his god-child. The main point of this gift, again, is that the child develops through creative activity.

The eleventh gift, ring-laying, consists of wire rings or circles and half-rings, of three sizes: one inch, one and a half, and two inches, respectively, in diameter. By means of these the child becomes familiarized with the properties of the curved line, by laying them in different positions and arranging them in various ways and combinations. The symmetrical forms predominate in this gift. The method is the same as in stick-laying; number is the guide. The material of these rings becomes a new point of interest. And finally the tenth and eleventh gifts are used combinedly, always adhering to the method, yet after each exercise giving the child freedom to shape and form as he pleases.

In the twelfth gift, the thread-game, a worsted thread of bright color, representing the pliable line, is used. Its ends are joined illustrating the circle as an equally distant line from its center; this the child has to arrange himself. The thread must be saturated in water and is used upon the surface of a wet slate to which it adheres; and with a little stick or slate pencil and the fingers the thread is moved about to produce the three groups of forms. This is "drawing with a given pliable line." The dry thread is also used for various hand games, "cat's cradle" for one. Also knots can be made in pretty variety, letting number take the lead. An amount of general knowledge will again be acquired; the materials—the thread, slate, and water—inducing the child to bring forth his little store of facts.

The thirteenth gift, the embodied point, represents the smallest portion of the body. Seeds, pebbles, or small shells may be used, such as are qualified to form lines. The materials lead to grouping and assorting, the aim being to make the habits of the mind and

body orderly, practical, and logical. The material is again used in relation to the network of lines, and in accordance with the three groups of forms found in all of the previous gifts. Points are joined to form lines; and lines of various directions are combined to make outline forms.

THE OCCUPATIONS AND THEIR USES

In the occupations of the kindergarten the material is of a more flexible kind than that used in the gifts; but the same general principles are applied. The occupations are evolved by synthesis from the point; and there is transformation of the material itself which cannot take the original form again.

The occupations have a far higher aim than merely to develop dexterity of the hand; for this would degrade them to mere mechanical work by leaving the principle and aim of the kindergarten entirely out of sight. In the first occupation the point is simply treated. Perforating is one of those occupations of the kindergarten which are greatly misunderstood. This occupation represents that which is beautiful, not only because it is the child's activity, but mostly because it is the child's invention. The child gains the habit of seeing sharply and accurately, of judging distances and directions; and the intellectual faculties are called into action while the child is perforating the various forms. The most important feature is the effect on the esthetic nature. And the product of his activity not only gives pleasure to the child, but serves also to give joy to others. Mathematical intuitions are brought near the child by his own effort, but also an opportunity is given to impress on the mind forms of things that surround us. A piece of card is given, covered with the usual network of lines; and upon this the child finds and marks—perforates—his forms with a coarse pricker. Illustrations of contrast similar to those illustrated in the gifts are further applied in all the occupations. The true kindergarten idea is centered in the all-pervading connection between the things of sense and the things of thought. According to law the mind moves from the known to the unknown. The first use of the occupations is to train the eye and mind to become ready servants of the will. Froebel uses the full-grown and the mature human being in the babe. Therefore his method is that of

nature herself, which always has reference to the whole, and keeps the end in view in all the phases of development.

The second occupation, sewing-out, calls the dexterity of the hands and fingers and the muscles of these into activity, and trains the eye in accurate measurement. Perforating and sewing-out complement each other. Sewing-out may be regarded as a kind of drawing with various colored threads upon a network of lines forming squares for a guide. While Froebel applies this occupation in a way which trains the mind, yet it is often allowed to be performed mechanically. The child, in the proper application of this occupation, is obliged to think, to count, to plan, to be attentive. The inventive power is again incited and further developed, always considering the age and development of the child. The mode of process here is determined by the peculiarity of the material used (perforated cards and worsteds) and the lines to be used. It is a process peculiar to itself. The law of opposites is easily recognized in this occupation. Forms of life may be represented—the child “finding” his own forms. Also simple outline forms of objects, flowers, insects, birds, and animals may be given and sewn in appropriate colors.

The third occupation, drawing, is commenced by Froebel at an early age; he regarded it as an early means of culture, and, as such, demands observation, attention, recollection of what has been seen, power of invention, logical thinking.

Froebel has prepared a system of linear drawing so simple that it is easily understood by children, and yet is sufficiently involved to tax the powers of mature minds. This drawing series is a microcosm of the whole plan of kindergarten education. The elements are simple in the extreme, and few in number; each series has different lines to deal with. According to the law of opposites or contrasts these lines are arranged, rearranged, and composed into larger forms. Ever new combinations are developed, leading the child finally to find the points, by connection of which a circle may be drawn without other help. Children having entered the kindergarten when four years of age will be able to draw these forms, according to direction, without much effort when six or seven years old; and this leads to a correct representation of the curved line, quarter, half, and whole circles.

As in all the gifts and occupations, so here a certain freedom is

granted, the child using certain lines, drawing these either to represent symmetrical star-like forms, or simple representations of objects he sees about him. The creative power will here develop again. By conforming to a certain rule, the imagination will expand, whereas otherwise it would degenerate, and simply wander aimlessly about, bringing forth no results. Even the greatest artists and inventors are compelled to obey some law.

The fourth occupation, coloring and painting, combines the chief elements of graphic art: form, light, shade, and color. The network of lines used in coloring is of a larger size than that used heretofore. The process is from line to surface. Crayons of primary and secondary colors are used, outline forms (geometrical) are made and filled in with parallel lines, until the child is able to produce a surface in orderly manner. This first drawing with colored crayons corresponds to the tablets in the seventh gift. Soon the possibilities of pretty designs will be increased, always using the rule of "freedom" with certain limitations. The brush will be substituted for the crayon, when the child experiments in making his own colors by mixing the primary colors and represents surface forms on a large network of lines. These forms are again classified under the three heads as before. Also, free exercises without limitation are allowed after each serial exercise.

The fifth occupation, paper-interlacing, leads over to net-weaving. Long strips of colored paper are interlaced into pretty symmetrical designs upon the basis of simple geometrical forms, showing that these, when combined, produce figures of much beauty.

The sixth occupation, mat-weaving, is used to weave strips of paper into a continuous web, representing a surface, teaching the child combination of colors and calculation of numbers, to produce patterns within the limitation of the first five numbers. This leads again to an independent effort, resulting in free-weaving, easy cane-work, and basket-making.

The seventh occupation, paper-folding, consists in bending and folding over the edges and corners of a given piece of paper—square, oblong, triangular, or circular. This occupation applies to the child's sense of form, of place, number, and size, as well as of objects resembling the forms folded. Valuable instruction is here again interspersed. Fundamental mathematics are thus taught to the child up to the tenth year, and are then elevated to ideas. Hence,

this occupation, after having served as a means of play and employment in the kindergarten, becomes for the same child, later, an esthetic, technical means of culture.

The eighth occupation, paper-cutting and mounting, represents the separation of the surface and the reunion of the parts to a whole form. Analysis and synthesis are here combined. This occupation also corresponds to the tablets. A 5×5" square piece of paper is folded into an eight-fold double triangular ground form, containing a network of lines upon its upper surface; and by this the child is guided to cut the ground-form vertically, horizontally, diagonally; i. e., once or twice in parallel lines; or, as advancement takes place, parts of the form are cut out; and the form and its parts are then assorted, rearranged, and mounted symmetrically. It is drawing with scissors without pencil-marks, the only guidance being found in the network of lines on the ground-form. The forms of knowledge thus cut from the ground-form are based upon geometrical calculation. Free cutting is cultivated after the regular exercises.

The ninth occupation, pea-work, consists in the connection of peas and sticks, to form the outlines of surfaces and the skeletons of solid bodies. That which in the preceding gifts was solid is in this occupation transparent. The child makes here again in outline, all the forms of previously used gifts and occupations, geometrical outline forms, symmetrical forms, and miniature forms of real objects. Prisms and pyramids and crystalline forms can be represented with little effort. The letters of the alphabet may be made.

In the tenth occupation, paper-modeling, the previous forms are reviewed, while here the surfaces receive the chief consideration. Paper, covered with a network of half-inch squares, is measured, cut, folded, and shaped to represent, as in former instances, (1) forms of knowledge, (2) forms of life, and (3) forms of symmetry.

Children can easily learn how to make a box; and this is used in teaching them numbers, addition, and the multiplication table by their own work.

In the process of synthesis, paper modeling stands between planes and solids; these forms are now built up from the plane. Thus a set of prisms and pyramids are designed, made, and combined, starting with the cubic form and reaching up to the dodeca-

hedron and icosahedron. Free work is finally the outcome of each directed set of forms. This is indeed a valuable foundation for the future study of mathematics.

The eleventh occupation is modeling in clay. The first steps in this occupation are very simple. The beginning is made with damp white sand on a sand tray. In clay-modeling the so-called "forms of life" are at first predominating. The child becomes, by imitation, a tradesman, shaping small forms of bread, making a ladder, a boot, a hat, etc. Fruit is imitated in miniature forms, also vegetables; imprints of leaves are taken, becoming a first lesson in botany. Chinaware is imitated, and tinware; furniture even is attempted. These forms are developed from the four fundamental bodies of the second gift, and their division into halves; and further from the surface of the half-body. For instance: It is easy to shape an apple from a sphere; from the half-sphere, a bird's nest or a basket; from the flat surface of the half-sphere, a plate or tray. The cubic form could by slight addition be shaped into the form of a trunk, etc. All the previous bodies of the gifts can be reproduced by means of the pliable clay, and used for fundamental forms of objects.

Flowers can be copied and arranged on a plaque, and by so doing the children will be led to discover many things by themselves. The fourteen stereometric ground-forms are intended to be made by older children. The different geometric bodies can further be applied by joining several of them. And, finally, a first step toward the understanding of art may be taken by leading the child to represent the column; and this may lead to the representation of a building.

Froebel means for the educator to go slowly and surely, thus impressing the child far more than if he were assailed by a crowd of new forms, sights, or sounds. And, as the child moves the objects, measures and shapes them, talks and sings, he is imperceptibly guided to move in accordance with them. Conjointly with this, the way is opened toward training the will in the right direction. And as there are many opportunities given for bodily exercises during the gift-and-occupation work, so there are also many for moral culture. Equally the affections and the artistic powers receive notice, while companionship is influenced in developing social qualities. While playing with the gifts, there should be

connected with this body movements whenever possible, thus reducing any strain that might otherwise occur.

From the objects and forms made in the gifts the possibilities of rich symbolism are striking, furnishing means for development of mind and body.

Language is developed, and the tone of the voice is trained. This is one of the points which should receive special attention as a preparation for the school; and this point is of importance. All actions should be connected by word; and hence free and personal conversation should be encouraged.

The process of both gift and occupation-work is again from imitation to dictation, being followed by suggestion, leading eventually to original work, invention. The guided work always precedes the free work; and the law introduced into the guided work, being gradually absorbed by the child, will later rule the free-inventive work. Froebel gives to the child freedom within certain limitations. His careful analysis of child-nature and his intimate knowledge of children afforded him the practical insight into the early educational process that makes his ideas so fruitful and important.

The key to the arch of the occupations of the kindergarten is the transformation of material. The related continuity is here again of the greatest value. The work is merely the means of educating the child. The visible, material production of the hand has a subordinate value, because the value lies in the influence which the work has upon the child. All-in-all it is the spirit which prevaleth, which cannot be exploited as a method. Nor can this spirit or harmonious atmosphere in the kindergarten be analyzed, for it is a subtle one. What is needed is the breath of the spirit which lives and breathes in Froebel. And wisdom is needed, to discern those things which make for true freedom. Froebel gave the suggestions and the examples, whereby he merely pointed out the way and the manner, not meaning them for imitation. The great law which finds expression in manifold nature is not limited. By means of using the same great law, true freedom is attained in the highest possible degree.

Nothing can take the place of gifts or occupations. Nature material may at times prove a greater incentive to expression than the gifts, though it cannot supplant them. Nature material has its own value, being used advantageously to enrich and to expand

the kindergarten materials as seasons or occasions may offer. To leave out but one or another of the gifts or occupations from the plan would create a gap in the logical process which makes it all so valuable and important.

An important question arises as to whether the child should be permitted the necessary length of time in the kindergarten, or whether, as designed by Froebel; the gifts and occupations should be continued in their extended development in the connecting class—the primary and the elementary school.

In the kindergarten we deal with pedagogics, and not with the invention of a number of entertaining occupations and plays. Were this idea left out, the kindergarten might be abandoned altogether. Froebel's series of play materials have the singular advantage of being all linked together, leading from one to another. It is true and practicable that most of them can be used separately, while they retain their educational value in providing children with a useful material on which they can exercise their industry, constructiveness, and inventive power. The greater value, however, lies in the fact of following one another by reason of connective necessity. This is true not only in the connection shown by the kind of material, but also by their adaptation to the age, and mental and physical powers, of the child.

Froebel designates the spirit and character of his play-and-occupation means thus:

They proceed from the unit resting within itself and develop according to the laws of life in all manifoldness. They commence with the simplest, just as they recommence on each new step again conditionally with the simplest, but later progressing to the nature of things and to the laws necessarily resting within them from the simple to the complex, from the undeveloped to the perfect. Each part that is being offered is always in itself a complete whole, and may thus be regarded as a seed or a bud from which necessarily new formations have to emanate. And these play-means have to embrace, as a whole, in process of their exhibition the entire field of the general intuition instruction, the foundation of all future instruction.

And Froebel's practice corresponds wonderfully with his theories.

The law of contrasts and their mediation Froebel recognized as being the law of development in nature and in man's life, and thereon he founded his play-and-education means. Each single

form offered—let it be ever so small and simple, or ever so large and complicated—is within itself a complete whole, and he thus likened it to a seed or bud from which necessarily proceed new formations. According to this condition, all the different gifts and occupations are gained necessarily as an outgrowth from one another in logical sequence; and hence, leaving out but one of them, the chain, linked so beautifully, so naturally, i. e. lawfully, is broken, and arbitrariness or disconnectedness sets in. And as a reflex and impression of all the child's doings will be found on his mind and character, the influence of cause and effect can readily be detected.

It is not in Froebel's plan to follow a program at the expense of sacrificing the true development of the child. The idea is that a program should fit the needs of the individual child's development, and not the child's capabilities be made to fit the program. Neither is it in the idea of Froebel that even an attempt be made to do a certain amount of work in a given time without regard to the individual.

The child is led to find succeeding steps, while dictation is valuable because of developing correct attention. The free activity in accordance with law gives a true measure of the limits of the intelligence and stage of the child's development. And, if doing healthy work, the child will foreshadow the next step following. The proof of the greatness and naturalness of these laws is seen when children of different generations arrive at like results.

Froebel says:

These employments aim at, and produce in man first of all, an all-sided development and presentation of his nature; they are, in general, the needful food for the spirit; they are the ether in which the spirit breathes and lives that it may gain power, strength, and extent, because the spiritual qualities given by God to man, which proceed from His spirit in all directions with irresistible necessity, appear necessarily as manifoldness, and must be satisfied as such, and met in manifold direction.

According to Froebel, the gifts and the occupations contain the universal elements of proper work for childhood; though they must be so understood as to be applied by the child according to the principles laid down by Froebel, or else they lose all their power for good, and may even tend to become harmful. To develop self-activity in the child does not mean his being busy; but that by his own effort he learns to overcome difficulties and perform duties unassisted, enlisting his entire self.

The gifts and occupations must not be regarded merely as toys. The educational value of each must be brought out. Each one is a means by which the child is assisted and led to observe, to examine, and to remember. To bring out a thought each day, making a change at the right moment, and not binding one's self down with iron-clad rules, will be found the true method. Lengthy sequences often forced on children's conclusions, and wearisome to the little child who only just begins to make connections, are not in place, and must prove harmful. Also what may be termed lessons in botany, zoölogy, geometry, etc., are out of place as separate studies. However, conversations and stories about flowers, animals, birds, and insects, introduced at seasonable times in simple, pure language, leaving out all technical terms, but emphasizing the most important characteristics, will leave a much more lasting impression than the most imposing language which conveys no idea, but remains scarcely a matter of sound to the little ears.

Children love change; and one subject carried on for days will tire the young brain. There is also harm in detailing too much in work or play. The whole plan or disposition of the future adult being is revealed in its most delicate lineaments in the child's playful activity. Whether the future life shall be sullied, peaceful, or rent with passion; industrious or indolent; whether it shall be a kind of dull vegetative existence, or a life full of high, conscious purpose; a life at peace or at war with society—all these questions are raised, and in part determined by the nature of and the conditions under which a child plays. In play these relations are revealed in nascent simplicity and in the unity of unconscious life. In the play, according to Froebel, may be found the germ for work. The right kinds of materials are provided upon which a little child might exercise his creative-productive energy under direction.

With Froebel this question of the right training of the creative-constructive activity from its earliest beginnings was akin to religion; it was, in fact, only another side of religious training. "Important as the first religious training is," he says, "early training to industry is every whit as momentous."

Froebel must not be copied; but the spirit and the law he put into his system must clearly be understood. The educators of these young children must not be mechanics of the kindergarten, but artist-kindergartners.

The object of Froebel's constant observation and reflection was *the growth of character*. And the practical measures he advocated have deeper reasons than those of expediency; for they lie in his views concerning the constitution of man, and his relations to the world, and to his Maker.

Froebel, a religious man, calmly adopted in 1826 the conception of evolution as a revelation of the Deity, applying it to a body of facts very different from those of physical science. Froebel turned a microscopic gaze upon the dawnings of individual mind, which is in harmony with his wider outlook upon the world of living men, of history, and of nature, and which must be seized in their reciprocal relations and with inevitable reference to the great goal of all things.

A very strongly marked characteristic of Froebel's mental activity was a craving to bring isolated things, facts, into some general relation. Froebel's sensitiveness to the relation of facts, moral and intellectual, the strong search to establish harmonies of relation as a principle to be kept in view in the field of education, is impressed upon everything Froebel ever did or said. This truth he symbolized in the *Mutter und Koselieder*, saying:

Treib mit deinem Kinde Nichts beziehungslos,
Sonst wird es dadurch leicht erziehungslos.
"Do not practice with your child anything without relation,
Or else he may become thereby bare of all education."

On the vast bearings of this principle are built up the kindergarten gifts and their uses, and the kindergarten occupations in their intelligently connected relations. Man is endowed with creative power—and this is the deeper meaning of all work. We do not work to get a living, but because it is the appointed means whereby alone we can develop the divine possibilities within us.

Children are much nearer the inner truth of things than the adult is; for, when their instincts are not perverted by the superfine wisdom of their elders, they give themselves up to full vigorous activity. "Their's is the kingdom of Heaven."

SUMMARY

To assist natural development toward its destination, education is to begin with the child's birth.

As the beginning holds the entire after-development, so the early education is of most importance.

The physical and spiritual development are closely connected.

The physical organs are the first of perceptible development; and these are the instruments for the spiritual development. Early education, therefore, deals directly with the bodily development, by which the spiritual development is influenced through exercises of the senses.

Nature has indicated the right way to proceed in the exercise of the senses, in the utterances of the child's instincts; and the natural basis of education can only be found through these. Not only physical, but also spiritual wants are expressed by the child's instincts; and both have to be satisfied. The development of the limbs by means of movements stand in the first place. Play is the natural form for the first exercises of the organs; hence play with the limbs is necessarily connected with the simplest spiritual cultivation. The child's soul can be awakened early in life only by physical impressions; and these should be regulated, and not left to chance.

Froebel's play-exercises are intended so to regulate the natural and instinctive activity of the limbs and senses that the purpose which nature intended may be attained. The child thus gradually awakening, his instinctive activity will gradually become conscious action, which, as further development takes place, becomes productive action or work.

The hand—the important limb as regards all active work—has to be called into play and development from the first. And Froebel has many hand-games and finger-plays by means of which are associated the most elementary facts and observations from nature and human life.

In all organisms all later development results from the earliest; as all that is greatest and highest springs from the smallest and lowest beginnings, so education must endeavor to emulate this unbroken continuity of natural development. And Froebel supplies the means for bringing about this result in a simple system of gymnastic games for the exercise of limbs and senses, which contain the germs of all later instruction and thought; for physical and sensuous perceptions are the points of departure of all knowledge whatever.

Froebel discovered a true and natural basis for infant educa-

tion, and in his *Mother-Play and Cossetting Songs* he shows how this education is to be carried out and made the foundation of all future development. And if the full benefit is to be derived from the kindergarten, then it is essential that the educational principles and methods of Froebel should be carried out from the child's birth, as indicated in the mother-play and cossetting song book.

The starting-point should therefore be the training of mothers and all who have the management of young children. They should know how to apply Froebel's first principles of education. This is of immense importance. Woman's true development in all classes will best be accomplished by training them for their educational calling; for nature has pre-eminently endowed them for this work.

The multiplicity and variety of the kindergarten materials as now manufactured have, so to speak, corrupted the simplicity of what Froebel intended; for his idea was to use elementary forms exclusively, and simple materials, and as much as possible of these being prepared by the children themselves.

Children under seven years of age are very much alike in all countries and ages.

The heights and depths of the moral and religious nature of children will open more and more on mankind, and on the educator's deeper and clearer views of Froebel's moral idea, as progress is made in moral refinement.

Froebel took the ground that the mother should be the educator of the child until seven years old; but observation told him that no mother had the leisure and strength to do for her child all that needed to be done in these first seven years without assistants and in the narrow precinct of a single family; for the social and moral nature after the child is three years old requires a larger company of equals.

The kindergartner has always to be guided by the abilities and fitness of the child; and should bear in mind that she lays the foundation for the elements of the branches taught in school. The kindergarten does just what neither home nor school can do for the child.

Although there is a multiplicity of play-gifts and occupations, Froebel limits them with the little child at first to only few forms, small numbers, and simple colors. As in nature and in art, all forms can be led back to a few fundamental forms.

Froebel's gifts and occupations of the kindergarten form only

a part of his educational means. Language, songs, stories, pictures, conversation, garden-work, the care of plants and animals—all are intended to train and influence the child. Example does much for the child. The spirit reigning elevates work and play to educational means; for the kindergarten is not meant for a pastime merely.

With the completion of right action today, the succeeding day has been already prepared. If today by a little effort the child progresses, his courage is growing to make a better effort tomorrow. Thus the beginning is made by the child toward becoming later a useful man or woman who will give all for the good of mankind.

IV

SOME CONSERVATIVE AND PROGRESSIVE PHASES OF KINDERGARTEN EDUCATION

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This article is undertaken with the full consciousness of the fact that fairness and justice can only be approximated in any attempt to give an adequate account of the conditions and causes which gave rise to the reactionary movement in kindergarten education. The attempt is made with due humility and a sincere desire to be fair to all parties, in both wings of the kindergarten movement; therefore, any unfairness which creeps in must be regarded as a result of the partial view and necessary limitations hardly to be avoided by a participant within the ranks.

In days past kindergartners were accused of being peculiarly satisfied with the system of education which they represented. In many instances this criticism was fair, though the critics must remember that the satisfaction was with the system and philosophy of Froebel rather than any individual exposition of these. This, however, would hardly be a fair criticism of the kindergarten attitude at present, for doubt has penetrated the very heart of the movement and "divine discontent" has wrought miracles here as in all other departments of life. History repeats itself in all ages and movements, and heresy has entered the paradise of the kindergarten world, destroying the peaceful satisfaction and pedagogical egotism of happier days in our early history.

The large number of kindergartners attending educational congresses and summer schools gives ample evidence of the present eagerness for better things. Members of this profession are in evidence at all educational centers, studying philosophy, psychology, nature-study, art, music, literature, primary methods—in fact, a little of everything in heaven above, the earth beneath, and the waters under the earth. The pursuit of the university degree is among us and kindergartners are candidates for degrees in all the large universities which have opened their doors to them.

In this article the attempt will be made to treat the subject of the new movement in kindergarten education under five heads:

I. Conditions and causes which gave rise to the reactionary movement.

II. The present status of the two movements.

III. The fundamental theoretical points at issue.

IV. The points of difference in practice between the conservative and reactionary movements.

V. The present and future needs of the kindergarten.

I. CONDITIONS AND CAUSES WHICH GAVE RISE TO THE REACTIONARY MOVEMENT

More than a half-century ago in an obscure German village, remote from the centers of commerce and learning, there arose a new movement in education which its founder, Frederick Froebel, christened "the kindergarten." Ushered into its uncertain existence amidst the most discouraging influences of poverty and obscurity, the new idea called for the most rigid self-sacrifice on the part of the unknown philosopher and seer who originated it, and inspired unquestioning loyalty in the devoted disciples who gathered about the expounder of this gospel of childhood.

There is something inspiring, and at the same time pathetic, in the history of this group of idealists, who gladly renounced careers, forfeited paternal approval and bequests, and endured separation from loved ones in order to consecrate their lives and worldly goods to the service of Froebel, by going into the world to spread this new gospel among parents and teachers. In many respects the devotion of this small unworldly group to its educational ideals is as unique and interesting as the Brook Farm circle, bound together by the transcendental philosophy of that period.

It was a time when romantic souls craved a mission, and all who came under the spell of Froebel's enthusiasm, men and women alike, were inspired with the same consecration to the cause and a remarkable personal faith in and devotion to Froebel. This not only continued throughout his lifetime, but, strange to say, is found in kindergarten circles at the present time; there still being a large body of kindergartners who bitterly resent any criticism of Froebel's philosophy or methods. This attitude of devotion and zeal has been admirably successful as a method of propaganda, for in less than a

half-century after Froebel's death, his followers, working against tremendous odds, have through their enthusiasm and devotion succeeded in planting the kindergarten in the most remote corners of the earth.

While such unanimity of opinion and unquestioning loyalty were necessary in the establishment of this, as of all other new movements, the usefulness of the unquestioning acceptance of Froebel's message came to an end when the kindergarten became an established fact. In the course of events this attitude had to be superseded by a more critical attitude toward the work of Froebel, as well as of ourselves, if the kindergarten was to keep pace with other movements in education. Consequently, as the circles of influence spread away from this center of devoted followers, those who entered the work began to look at it more critically and impersonally. Up to this time most of the criticism had come from those outside the ranks, and he was a brave man indeed who dared to tread on the sacred ground of Froebelian education.

However, as the kindergarten gained ground and bid fair to survive, kindergartners themselves began to doubt the infallibility of the system, and criticism arose within the ranks. It was impossible for this more critical attitude to develop among kindergartners as long as the cause was struggling for a bare existence, and kindergartners were constantly on the defensive for it; but, when survival seemed a certainty, the next step necessary to promote growth and guarantee a future in education was doubt, and a right to difference of opinion among kindergartners themselves. This critical attitude spread rapidly within the fold, and, as conviction was equally strong with all parties, an unconscious and unpremeditated division was the only possible outcome with conscientious thinkers, holding opposing views.

It was a delicate task indeed to designate these opposing parties in terms satisfactory to each, whether distinguished as "orthodox *vs.* heterodox," "conservative *vs.* progressive," "traditionalists *vs.* radicals," "loyalists *vs.* secessionists," or "old school *vs.* new school." There are many who object to any of these terms as designating the position they hold. These would have a third party organized, which is supposed to stand upon a sane middle ground. They, however, fail to realize that, no matter how conservative or radical opponents may consider one another, no one ever considers

herself extreme, and each would classify herself as one standing on this *same* middle ground, avoiding the fanaticisms of extremists in either direction.

Naturally, the conservative wing of the kindergarten considers the radicals dangerously heretical and revolutionary, while the radicals are equally sure that the conservatives are narrow, unprogressive, and fanatical. There is still much anxiety among kindergartners as to the outcome of this division in the ranks. Some fear that it is an illustration of the house divided against itself; others, that it is a most healthy indication of growth—the kindergarten's sole guarantee of survival and an honorable position in the future history of education.

II. THE PRESENT STATUS OF THE TWO MOVEMENTS

Nothing better reflects the history and development of the kindergarten movement than a comparison of kindergarten conventions in the past and those of the present. In the earlier days of kindergarten conventions only such subjects as "The Threefold Nature of the Child," "Unity in Diversity," "Harmonious Development," "The Law of Opposites," or eulogies of Froebel and the kindergarten were given the sole right to a place on the program. At these gatherings one listened to inspiring addresses on themes with which all were familiar and upon which all unanimously agreed. This was all well and good in the early history of the kindergarten, when strength and encouragement were needed in order to maintain faith in Froebelian thought rather than suggestions along the line of modifications and growth.

Later came those epoch-making conventions when some bold critic, outside the ranks, dared to voice his doubts as to the advisability of keeping intact the traditions of the kindergarten as the best means of meeting present needs and future conditions of growth. Needless to say, there were no words of approval or encouraging applause, but rather an ominous silence, combined with a frostiness in the atmosphere which made the critic feel that he had come ill-clad for so chilling a temperature.

Fresher still in the memory are the more recent meetings of the International Kindergarten Union and Committee of Nineteen, where all the points at issue were freely and frankly discussed by representatives from both wings of the kindergarten, and a most

respectful hearing given opposing opinions, whether voiced by one of the kindergarten profession or by critics from other departments of education. Since this time kindergartners have been learning not only to agree to disagree, but to value criticism from those holding opposing views.

The printed programs of the International Kindergarten Union and all its branches show a goodly array of noted specialists in philosophy, psychology, sociology, art, literature, and music. These experts are not only invited, but urged to give their criticism of kindergarten methods in the light of their specialty, and these criticisms, together with the opposing views held among kindergartners, are shaking the earlier pedagogical egotism to the foundation, and slowly, but surely, kindergartners everywhere are learning to welcome respectful criticism and to value truth from any source.

III. THE FUNDAMENTAL THEORETICAL POINTS AT ISSUE

Many of the theoretical points at issue in the kindergarten profession are mere differences in interpretation, and hence are of greater importance to kindergartners than to educators in general. However, as the kindergarten is being incorporated in the public-school systems in all our large cities, these differences in both theory and practice are becoming increasingly important to all the superintendents, principals, and teachers of our common schools.

While there are many vital phases of philosophy which all kindergartners hold in a common faith and love, there are points upon which the two schools of kindergarten vary fundamentally, even though the uninitiated can discover no significant differences. Some of the most marked differences are here, as elsewhere, due to temperamental causes, repeating the universal tendency to opposing views in philosophy, theology, literature, music, and art. In fact, temperament and training will easily account for the different valuations and emphases which kindergartners place upon the following aspects of thought: a more or less static *vs.* a dynamic interpretation of the German philosophy of the early nineteenth century; the rationalistic and introspective *vs.* the genetic and social psychology and child-study; the standards of civilization *vs.* the standards of the child's impulses, interests, and stages of development; the importance of stirring in the child's heart and mind symbolic premonitions and spiritual ideals *vs.* the importance of providing

the social situations which lead to the formation of unconscious habits of social worth; the poet *vs.* the scientific; the esthetic *vs.* the industrial; the diffuent, mystic, and remote imagination *vs.* the sensorial, plastic, and practical imagination; Froebelian authority in theory and practice *vs.* experiment and research for truth from other sources, or better methods of applying Froebel's principles.

Attention is again called to the fact that these are mere differences of *emphasis* and *accent*, as no individual or school of kindergartners would eliminate either antithesis. However, all are guilty of emphasizing one phase of truth at the cost of its apparent opposite, and the much-talked-of "mediation of opposites" and "harmonious development" are sacrificed to a dualistic interpretation of that which a deeper study would reveal as different aspects of an underlying unity.

Some of the theoretical differences among kindergartners have no outcome in alterations or modifications of practice, being merely variations in terminology or interpretation. For example, the same activity of the child may be under discussion, and one group will interpret it as an evidence of the child's "premonitions," "presentiments," and "foreshadowings" of mature truths of significance to the adult only, while the other refers to the same activity as a native impulse, interest, or as a rehearsal or reverberation of deeply rooted instincts dating back to a prehuman or savage ancestry.

This causes grave accusations to fly backward and forward, the radicals accusing the conservatives of imposing premature standards upon the child and interpreting his activities from the adult point of view; on the other hand, the conservatives deplore the tendency of evolutionary interpretation to arrest the child's development upon the plane of the brute and the savage. The conservatives rightly emphasize the need of interpreting the results of child-study in the light of their ideal fulfilment in the life of the adult and the standard achievements of civilization, and the progressive school readily accepts this, but feels that no activity is fully understood until it is seen in the perspective of its place in the evolutionary process, and interpreted in the light of its origin as well as its spiritual destiny.

While both conservatives and radicals have their psychological creeds, the former tend to accept the rationalistic and introspective psychology which is felt to be more in accord with what may be

designated as Froebel's philosophy; the radicals tend to accept as a working basis the genetic and social psychology of the present day. This readily explains the emphatic differences of opinion upon the following points in psychology and child-study.

1. The relation of instincts and impulses to the higher capacities and powers.

2. The relation of desire to effort, or interest to will.

3. The relation of sense-perception to imagination and expression.

4. The relation of imitation to originality and invention.

5. The relation of sense-perception and experience to the formation of the concept.

6. The dawn and evolution of the analytical powers.

7. The dawn and evolution of the ability for abstract thinking.

8. The dawn and evolution of the esthetic sense.

9. The psychological resemblances and differences between work and play.

10. The relation of activity to knowledge, or expression in relation to the rise and formation of the image and idea.

The position of both conservatives and radicals upon the foregoing points is so decided as to give rise to the marked differences in practice, which in turn gave rise to the necessity for a reactionary movement in kindergarten circles. These opposing views are having a most salutary influence upon each movement, and at present we cannot afford to dispense with the views or methods of either group.

Wholesale conversion would be most disastrous, for out of these opposing views will be sifted the safest and best held by each, which will give rise to a more balanced kindergarten system in the future, one that has gleaned much from both the faults and virtues for which each stands. Aaron's rod has put forth leaves. If such a wholesome state of affairs has come about within kindergarten ranks, it is a prophecy of great promise for the regenerated kindergarten of the future.

IV. THE POINT OF DIFFERENCE IN PRACTICE BETWEEN THE CONSERVATIVE AND REACTIONARY MOVEMENTS

The points of difference in practice between the conservative and reactionary movements as exemplified in—

- (a) Programs.
- (b) Gifts.
- (c) Occupations.
- (d) Art.
- (e) Plays and games.
- (f) Literature.
- (g) Music.

It demands keen discrimination from a visitor who is not familiar with modern educational theory and the technique of the kindergarten to draw any distinctions of significance between the work of a conservative and a progressive kindergarten. In fact, to the ordinary observer the children seem equally happy, industrious, orderly, and healthy, and such a guest is likely to conclude that our heated discussions are a case of "much ado about nothing." On the other hand, a visitor with a fair knowledge of modern educational theory and the technique of the kindergarten will at once detect a difference in the conception of discipline and a marked difference in the uses of the gifts, occupations, and games.

(a) *Program*.—As it has seemed almost ridiculous to refer to a course of study for the tiny children in the kindergarten, the word "program" has been substituted for the more formal term.

Leaders in the conservative movement of the kindergarten have mapped out a program which was formerly called the "Uniform Program." This has been in use for years in many of the kindergartens in our large cities. It represents most careful study and thought in all its minute details, and has the distinct advantage of having been planned originally by a kindergartner of wide learning, scholarship, and experience. It was then submitted to the judgment of practical workers of less experience, until, as it stands today, the program is supposed to have been filtered through many minds and represents the "collective mind" of a large number of supervisors and training teachers "in close touch from the theoretical point of view."

This "Uniform Program" is finished in detail and ready for use in the kindergartens of all cities for all children of all classes. The subject-matter of this program consists in what are called "pattern experiences" or "typical activities" which are drawn from Froebel's *Mother Play Book*. Though this was undoubtedly an epoch-making

book, many of the progressive kindergartners feel that it is most suggestive when studied in the light of its period and natural setting; that is, as a book of plays and games written for mothers and children living in the peasant villages of Germany more than a half-century ago.

This program is arranged to meet the needs of a sort of "universal child-mind," and its adherents are strong in their denunciation of any program that emphasizes the need of adaptation to the social situations, in which particular groups of children "live and move and have their being."

When Mr. Courthope Bowen, of England, suggested that only the principles of the *Mother Play Book* should be followed, and that little children living in England or America should have plays and games reflecting their own environment just as the *Mother Play* reflected the surroundings of German children, he was met by this argument from the kindergarten: "In opposition to this view I hold that Froebel's games dramatize ideal experiences which *all* children may and ought to have, and that consequently they should be played by children of *all* nations and *all* conditions of life."¹

While the radicals would not accept the particular substitutes which Mr. Bowen suggests, they do feel that the principle of adaptation is a valuable one.

This carefully systematized program certainly has many points of excellence when used as a basis for selection or suggestion; but when a supervisor in one of our large cities, where the Uniform Program is in use told us that she could look at her watch at any moment and know exactly what was being done in every kindergarten under her supervision, one can but feel that the individuality of the kindergartners carrying out such uniform details, and the best interests of the children of different experiences and capacities, must be unduly sacrificed to such a pattern system, no matter how good it may be in the abstract. Even such minute details as to what questions are to be asked, what illustrations chosen, and not only what gifts or occupations are to be used, but also what moves are to be made with them and in what order of sequence, are prescribed and prearranged. No primary or elementary course of study in existence leaves so little to the initiative and judgment of the teacher.

The new school of kindergartners feels that the tendency of such

¹ *Symbolic Education*, p. 169. Susan E. Blow.

a program is to blight the individuality of the kindergartner, to kill the incentive to study and plan her own programs, and to tempt her to put all children through the same set régime whether they live in the crowded tenement or suburban village, at the sea-shore or in the inland town.

On the other hand, in all justice it must be accorded that some of the radicals must plead guilty to too great laxity in leaving programs to the limited experience and judgment of immature kindergartners. However, they do believe that, if the object of education is to help the child to an intelligent participation in the most significant experiences of the situations in which he lives, this tendency to accept *any* one program for all children of all experiences, capacities, and environments violates the most fundamental demands of modern educational theory and practice.

While it is but fair to the able authors of this program to state what their plea is and that it should be used suggestively rather than literally, the practical result with the kindergartner has often been the formation of habits of undue dependence upon the plan of such well-known authorities, and the feeling that its wholesale acceptance is safer than any variation which her lesser experience suggests. The outcome with kindergartners, who form the habit of dependence upon any fixed program during the years of professional growth, appears to result in an unquestioning acceptance of the infallibility of the same, in proportion to the number of years it has been relied upon. In many instances there is also noted a singular blindness to the virtues of any other programs which vary fundamentally from the one adopted.

While it must be freely acknowledged that such conditions result from an abuse of this program, which is contrary to the spirit of its author, it is equally true that such a detailed course of study given by *any* able authority tends to overpower the judgment of immature teachers and cause them to fall back upon any ready-made program which relieves them of individual responsibility, saves time, study, and individual planning from day to day.

(b) *Gifts*.—It is taken for granted that the readers of this article are familiar with the fact that Froebel's so-called "Gifts and Occupations" form a series of educational materials based upon the principles of analysis and synthesis. The gifts begin with the ball or sphere analyzing through solids, surface, and lines to

the point; while the occupations reverse this order embodying the synthesis of form from point, through lines and surfaces, back to solids. The traditional procedure has been to cling to this logical circle of materials and so use them that "the child will gradually grow into a consciousness of their geometric relations," types, and evolution.

The progressive school believes that little children cannot appreciate the geometric evolution of such a logically planned series of objects, and in breaking through the charmed circle of geometric logic, this school tends to select or emphasize only those gifts in the Froebelian series which they feel are suited to meet the experimental and constructive needs of childhood. This results in an emphasis upon those gifts which are blocks, rather than upon that portion of the material which grows smaller and more abstract as the series is analyzed through surfaces and lines to the point.

The different uses of the gifts and occupations, now under discussion in the kindergarten, seem to correspond to the different attitudes held toward the use of the alphabet and the technique of reading and writing in the primary grades. The question of paramount importance is, Shall the gifts and occupations be used to bring to consciousness the qualities and geometric relations existing in and between themselves, or, shall they be used for experiment, expression, and construction first, leaving to a much later consciousness the fact that they are made of spheres, cubes, cylinders, corners, edges, squares, surfaces, angles, points, etc.?

In the Uniform Program used largely among conservative kindergartners the gifts and occupations do not seem to be emphasized as a means of expression and representation. On the contrary, they seem to be used as the A.B.C. of form and geometric evolution.

Fortunately the day has dawned when kindergartners bound by the closest ties of friendship can disagree frankly, yet for fear unfairness may have unconsciously crept into the above statements the following quotations from some of the most prominent conservative leaders are given.

Through using the gifts in productive *exercises* the child is incited to observe the elementary qualities of all material objects. The qualities form the alphabet of nature, and Froebel has so organized his gifts that each letter in the alphabet shall be almost unconsciously learned.¹

¹ *Report of the I. K. U., 1900, p. 51. Susan E. Blow.*

Again we have from one of the more recent writers on the use of Froebel's gifts and occupations the following:

As the kindergarten gifts are designed to serve as an alphabet of form, by whose use the child may learn to read all material objects, it follows that they must form an organically connected sequence moving in logical order.*

The radicals value Froebel's gifts because they offer opportunities for—

- (1) Play,
- (2) Free investigation and experimentation,
- (3) The development of the constructive instinct,
- (4) Expression and representation,

and do not emphasize, *save in the most incidental way*, the use of the gifts as—

(1) A means of bringing to consciousness the geometric or symbolic qualities and relationships inherent in the gifts themselves;

(2) As a means of helping children to form the habit of classifying all the objects in their environment under some type form, color, or activity;

(3) As a means of abstracting from their natural setting the qualities of form, number, color, motion, direction, and position, which naturally come to consciousness at a later stage, and then through first-hand contact with the natural objects in which they inhere.

The radicals believe the gifts should be used as a means to an end; that is, they believe that the child is naturally trying to express, through the medium of the gifts and occupations, the images and ideas which come to him in his social and natural environment. The kindergartner accordingly fulfils her highest function when she helps the child to do, with educational value, that which he is seeking to do alone; in other words, that through the child's own impulse to express and represent his social environment through the medium of play she brings to his consciousness the industrial and esthetic and ethical values bound up in his own most significant experiences.

We have Froebelian authority for the truth that what the child imitates he is trying to understand, and radicals gladly accept this statement, provided they are not asked to believe that it is the formal

* *Froebel's Gifts*, p. 8. Nora Smith and Kate Douglas Wiggin.

aspect of objects and results that the child is trying to understand through imitation.

All the experiments of Barnes and Binet go to prove that the abstract attributes, such as form, color, etc., play a very small part in the child's consciousness at this age; on the contrary, investigation points to the fact that it seems to be function, purpose, use, or service which the child is trying to understand; that is, he is trying to establish some kind of a rational relationship between objects and personal and social needs.

While the cognizance of attributes of objects enters unconsciously into the apperceptive process of the little child's thinking, it seems legitimately to remain below the plane of consciousness. In fact, the mental activities by which the mind is constantly observing, discriminating, and classifying objects in the light of their attributes may be compared to the automatic and reflex activities of the body, in that, while fundamentally important, the degree to which their working remains below the plane of consciousness is an indication of their normal activity and the good health of the subject.

Binet sums up the result of his investigations as to what elements enter into a child's thoughts about and definitions of things in these words:

It is almost never a question of the visible aspect of the objects. The responses bear almost entirely upon the uses of the objects. Bread is for eating; a chair is for sitting upon; a table is for putting lamps or books upon; . . . they are utilitarian above everything; . . . the child is naturally attentive to the uses of objects.⁴

There is strong evidence pointing toward the fact that Froebel used his own materials in this more playful, natural, and childlike way as long as he came in direct daily contact with the children themselves, and that the more formal methods crept into his procedure as he devoted more of his time to the training of the adult. However true this may be, Froebel certainly was impressed with the little child's very personal interests in the use or function of the object; for he said:

The child, though as yet very dimly, connects with the something the perception, the idea of a purpose for this something; for example, he connects with a chair or bench the idea that someone can sit upon it.⁵

⁴ "Perceptions d'enfants," *Revue philosophique*, December, 1890.

⁵ *Froebel's Pedagogics of the Kindergarten*, p. 128.

The studies of Barnes⁶ and O'Shea⁷ emphasize the same point; the returns indicating an overwhelming interest in and appreciation of utility as compared with the more formal aspects of form, color, material, etc.

There doubtless may be justification for a *limited* use of the gifts and occupations in the construction of "forms of knowledge and beauty" from the fact that there are some *slight* evidences of the child's interest in abstract knowledge and his enjoyment in the construction or possession of objects for purely esthetic reasons.

However, if the results of these investigations are trustworthy, it seems that they should lead to an increasing valuation of the gifts and occupations for the construction of "life forms" and a decided limitation of the traditional use of these materials in the constructions of forms of "knowledge" and "beauty" as mere ends in themselves.

The radicals believe that the mental habit of observing all objects in the light of their form, color, position, etc., tends to mental perversion and arrested development. They believe that all these points should be subordinated to function and should be brought to the child's consciousness only in so far as they serve function and lead to truer expression. In other words, the gifts should be used mainly for experimentation, or as a means of social *representation, interpretation, and clarification*, through the medium of play. Just as the new education has struggled to subordinate the technique of reading and writing as an end, and make the mastery of them a means of expression and communication of thought and social values, so the radicals would deal with the gifts.

Used in this way the gifts are a means of relating the child to the life around him. The kindergartner, presenting the ideal of social service, throws the children upon their own resources in creating forms that embody that function. Utility is considered very materialistic by the conservatives, but if use is interpreted in the light of social service, it embodies one of the highest ideals which the child's mind can grasp, and one which makes him a more intelligent and helpful member of society.

A prominent kindergartner criticizes this use of the gifts as a means of reproducing and interpreting social life in these words,

⁶ *Studies in Education*, Vol. I, No. VI.

⁷ *Dynamic Factors in Education*, p. 72.

which will illustrate the typical differences in the use of the gifts in the two schools of kindergarten: "It must be remembered that the building gifts are not intended so much to illustrate the real or vicarious experiences of life as to acquaint the mind with the general properties of matter."⁸ In answer to this statement the radicals would reply that it is not only unnatural, but a distinct mental perversion to cultivate in little children this habit of thinking of objects primarily in terms of form. Such methods easily lead to arrested development on this plane, for, as Dr. Harris maintains, "arrested development on the stage of number or color of any other abstract phase of things is injurious to the mind. . . . *The kindergarten has its dangers of arrested development.*"⁹

On the other hand, to help a child deepen his natural tendency to approach and interpret objects from the standpoint of their social purpose, or significance, at once establishes a rational association and relationship with his environment. It enables the child to play an intelligent part in life, helps him to gain control over his surroundings and to form sensible habits of behavior when confronted with social problems.

The important things for a little child to realize in the presence of objects is not that they are circular or triangular, but that they have social utility (or meaning) the significance of which he must gain if he is to "orientate himself intelligently in social situations."

The important thing for a child in the presence of a rolling-pin, a wheel, or a hoop, is not that he shall classify them under certain geometric types, but rather, if he thinks of form at all, that he may through the use of the objects be led to see that being circular makes certain functions or activities possible. The following story well illustrates what radicals consider the legitimate outcome of these formal methods with the gifts in developing in children the mental habit of thinking of objects primarily in terms of form.

A small boy of five came into the kindergarten one morning with radiant face and sparkling eyes, crying out in joyful tones: "I have something for you! It's hard and long and has four edges and two ends!" The precious object was held behind him, while he danced around in fond anticipation of the pleasure he was about to give his teacher, of whom he was very fond. "What can it be?" she answered, entering sympathetically into his pleasure.

⁸ *The Kindergarten Building Gifts*, p. 83. Elizabeth Harrison.

⁹ *Kindergarten Psychology*, p. 6.

"Do show it to me." In proud triumph the hand which held the treasure was extended, and in the palm lay a burnt match. And the kindergartner accepted it as a gift of value, for had it not helped to unlock the great world of form and its elements—faces, corners, and edges?¹⁰

If only that knowledge is of most worth which arises in social experiences and in turn interprets and enables one to gain control over them, this accumulation of formal knowledge seems to be purely extraneous, in no way furthering the little child's intelligent participation in the life around him.

It is interesting to know that criticisms of the formal use of Froebel's gifts are not confined to present-day critics alone. We are told that at the Rudolstadt convention, when Froebel himself had shown the German teachers of that day what could be done with his gifts in mathematical forms, the following criticism was made by an auditor:

I hold that it is an injury to child-nature to lead too early to observing and discriminating the geometric forms, as illustrated in the cubes, oblongs, etc. The Froebel gifts, as they are supposed to be presented to the child, suggest too strongly the dissecting-knife method. Froebel will not stubbornly hold to his method of presenting the same, if we can show him a more normal and natural application of his kindergarten idea.¹¹

(c) *Occupations*.—If the activities which the kindergarten and primary school hold in common could be designated by similar terms, it might serve to bring to the consciousness of both the kindergarten and the primary teacher the unnecessary break between these two grades of education. The kindergarten refers to hand-work or industrial activity as "occupations"—a term which frequently passes out of use in the industrial activities of the grades.

The traditional occupations of the kindergarten begin with the geometric point exemplified in a sequence of exercises in "pricking" or perforating a series of points into lines; this is followed by exercises in lines and surfaces, culminating in the cardboard and clay-modeling which embody the solid. The occupations thus reverse the order of analysis in the gifts and, by the principle of synthesis, complete the other half of the circle of unified material. Many new-school kindergartners believe that these Froebelian occu-

¹⁰ *Kindergarten Building Gifts*, p. 52. Elizabeth Harrison.

¹¹ *Girlhood Days at Keilhau*.

pations are logically planned exercises in geometric evolution, and *as such* do not appeal to the interest and self-activity of the child at the kindergarten period. A number of the exercises in sewing and weaving, etc., are fine and small, demanding the use of the accessory muscles of the eye and hand which are so easily fatigued at the kindergarten age, thus tending toward abnormal exhaustion and nerve-strain.

They also believe that these sequences in sewing, weaving, folding, etc., are too abstract both as to process and product and that, as sequences, they meet no need in the social experience of the child. The activities of sewing, weaving, folding, etc., are interesting to the child and fundamental industries in race-life, but when confined to the production of endless geometric exercises in the creation of products which serve no purpose in the child's life, they fail to fulfil their most educative end. Some of the new-school kindergartners have retained these historic race activities, substituting larger, and more durable materials for the more perishable ones used in the traditional occupations.

These new occupations have been called constructive because they were planned to meet the constructive instinct of childhood. As representations they are more real, and being constructed in three dimensions they offer quite a contrast to the flat picture occupations of the orthodox type. For example, a real kite is constructed instead of a geometric form, vaguely and often poorly representing a kite; a doll hat or doll rug is woven instead of a series of paper mats to be pasted in a book, or hung upon the wall.

In fact, some radicals go so far as to say that the production by the child of his own toys might serve as an excellent transition from the attitude of play to that of work, in that, while toys represent a conscious need of childhood, their production demands a subordination of the process to the accomplishment of a product and application to an end, which is quite characteristic of the attitude of work. Such products of child-activity are necessarily crude, and if judged by adult standards of beauty they will be weighed and found wanting. However, they call forth the child's interest and determination—his self-activity—as the weaving and folding of geometric sequences as such never can.

Such occupations as these easily develop into the more finished and esthetic occupations of the modern primary school. In fact, if

an exhibit of the traditional occupations of the kindergarten and those from a progressive primary school are placed side by side, one cannot but be impressed with the small, fine, abstract, and unchildlike processes and products of the kindergarten occupations. There is in truth no more damaging evidence against the kindergarten occupations of the orthodox type than such an exhibit furnishes.

As it seems best to give the opponents' point of view in their own language, the following quotations from one of their most recent guide-books is in order:

Thus the child has been guided in a logical manner from the solid body through its divisions, and through its embodied plane, line and point, in matter and by matter, to the borders of the abstract; and if the work has been properly done, and if the other instrumentalities of the kindergarten have been wisely managed, the child is ready to build the conventional studies of the school upon the foundation of his objective knowledge.¹²

This last statement the new-school kindergartners would decline to accept, as they feel that no good modern course of study for primary education could be based upon, or normally grow out of, any such mature, abstract, formal knowledge.

(d) *Art*.—In years past the fundamental differences in kindergartens were largely focused upon the use of the gifts and occupations; whereas in the last few years they seem to center more and more around the art activities. The effects of the mechanical and formal school of drawing planned by Froebel have been so strongly criticized by artists that kindergartners of all creeds and faiths have practically substituted the more spontaneous free-hand drawing.

A large proportion of the series of occupations in the kindergartens of an earlier day involved the production of unending sequences of symmetrical figures called "beauty forms." The gifts were also used to this end, and the consequence has been an undue emphasis upon the use of these crude, symmetrical figures in borders and designs. For years the art-training of the children in the kindergarten was largely limited to these forms, but again the artists have dared to criticise the theory of Froebelian art and have denounced the effects of these beauty forms on later art expression. While the artists were criticising the crude and inartistic effects in these forms, the psychologists were equally decided in the denunci-

¹² *Kindergarten Occupations*, p. 15. Smith and Wiggin.

ation of their value in meeting the needs of the child at the kindergarten period.

The new-school kindergarten has reacted against the undue proportion of "beauty" and "knowledge" forms compared with the more natural impulse of the child to construct life-forms, which reproduce the familiar objects in his social environment.

While the kindergarten child's esthetic sense is most worthy of deep consideration, it is so closely bound up with the instincts of construction, representation, and personal decoration as to warrant little in the way of a direct appeal. Notwithstanding this fact, with the recent influx of art work into the kindergarten a conscious appeal is being made to the mature principles of composition involving relations of space, line, color, tone, and hue.

Caroline Frear Burk sums up the results of her study of the child's natural impulses toward the production of "life," "knowledge," and "beauty" forms in exceedingly sane language. She says:

It is evident that the kindergarten child's spontaneous activity and interest are toward natural and life forms rather than toward forms of beauty and geometric design, although clearly there are some traces of the art instinct in this latter line. . . . Interest in concrete representation far outweighs that in abstract form and design arrangement.¹²

Perhaps a goodly proportion of radical kindergartners would agree with Eby, who, after his study of the esthetic sense of the kindergarten child, says:

The esthetic awakenings of children begin to make themselves active in a remarkable way, during the kindergarten age. These interests center in drawing, painting, music, looking at pictures, clay-modeling, paper-cutting, and many other simple forms of childish activity, which are set off more or less by the imitative impulse. The chief thing noticeable in all these well-known performances is that they are as yet rather a means of expressing thought on the part of the individual and not directly an attempt to produce the beautiful.¹³

Sully also is quite impressed with the lack of esthetic intent and motive in the productions of earlier childhood.

The present tendency with both wings of the kindergarten is to make an appeal to a mature consciousness of the beauty in both

¹² *A Study of the Kindergarten Problem.*

¹³ "The Reconstruction of the Kindergarten," *Pedagogical Seminary*, Vol. VII, July, 1900.

nature and art composition which is characteristic of a later stage of development than the kindergarten. As a result you find tiny children in the kindergartens painting landscapes long before any such harmonized conception of beauty can possibly mature in the child-mind. From the external point of view these results are beautiful, but when measured by the standards of true self-expression they seem to be, largely, extraneous devices, and impositions of a mature sense of beauty in an art form far beyond the conception of the kindergarten child.

The method of securing these esthetic results is very deceptive to the teacher, as the child's love of washing in color, in masses, is so strong that he will fall in with any scheme which makes this possible, whether the form of expression to which he is led is a realization of any imagery of his own or not.

In addition to this mature landscape work there is a tendency, through the use of borders and designs, to bring to consciousness prematurely the problems of space, line, color, etc., involving a sense and appreciation of art relationship which belong to a later stage of development. It is undoubtedly true that even the kindergarten children need careful guidance, suggestion, and tactful criticism if we wish to prevent the tendency to arrested development on the plane of the crude spontaneous expressions of child-life at this period. But in all this carefully directed art work, which is certainly on the increase in *all* kindergartens, we need to be reminded of the fundamental importance of spontaneity *at this age*. There is a grave danger of blighting rather than guiding that spontaneity which is after all the pearl of great price, especially at this stage of the child's development.

The tendency to emphasize art-training at the cost of industrial training, which seems equally valuable, is voiced by one group of kindergartners in these words:

We deplore the tendency to make industrial aims paramount in education, and believe that the accent of the kindergarten should be placed upon the beautiful rather than the useful, upon the embryo artist rather than upon the embryo artisan.

The most trustworthy investigations in child-study seem to indicate the fact that the characteristics of the artist and artisan are merged in early life. They have not separated into a consciousness of the useful as something distinct from the beautiful. Guided by

this idea, the best effort in the art education of the elementary school is toward an attempt to unite the two, so that one may not be accented at the cost of the other.

On the other hand, granting for the time being that the sense of use and beauty have separated into a distinct consciousness at the kindergarten period, these questions arise: Why should one be emphasized at the cost of the other? Is not the ideal that of the embryo artist-artisan rather than that of the embryo artist or artisan?

(e) *Plays and Games*.—In the matter of plays and games kindergartners of both persuasions are rapidly approaching a common point of view. Until recently there was a marked division and varied opinions regarding the symbolic value of games: the conservatives emphasized only those games which were supposed to have symbolic values; the radicals went to the opposite extreme in valuing games largely from the standpoint of health, physical training, and hygiene. The problem of symbolism in games is on the decline, while the importance of the consideration of health is decidedly on the increase with *all* kindergartners.

Little has been said in this article with respect to the symbolic significance of the gifts, songs, and games, as the symbolic problems of the kindergarten seem to solve themselves in proportion to the degree in which they are ignored. While symbolism was the most significant cause of division among kindergartners originally, saner statements are now on the increase every day, and a few years of silence will do much to reduce the tendency to emphasize the statements of an earlier period regarding the child's "premonition," "presentiments," and "foreshadowings" of mature truths far beyond his grasp.

The degree to which children dramatize nature is under discussion in the kindergarten, and there is a growing conviction that dramatizations of moon-beams, nodding flowers, etc., are not so natural and wholesome as the dramatization of the activities of human beings in vital social relationships.

The problem of introducing formulated games into the kindergarten is also under investigation, as observations indicate that little children do not play formulated games to any great extent. The same observations suggest, too, the need of playing in smaller groups than any kindergartens at present have been able to arrange.

(f) *Literature*; (g) *Music*.—The kindergartners of all schools come nearer reaching a uniform conviction regarding music and stories than upon any other phase of the kindergarten program. While there is the old discussion with reference to the imposition of premature spiritual ideals in stories, and mature standards in music before the child can appreciate either, there is a healthy reaction in both wings of the kindergarten, and careful consideration is also being given the equally important danger of introducing cheap forms of music, literature, and art under the plea of simplicity.

THE PRESENT AND FUTURE NEEDS OF THE KINDERGARTEN

The points which follow seem to the author to be the imperative needs of the kindergarten in the future. They are given with the sincere desire that they may help to unify diverse opinions sufficiently to make it possible for kindergartners, with opposing views, to work together in happier relations in the future.

It is also equally important to point out any of the difficulties in adjustment which cause the break in the child's growth as he passes from the kindergarten into the primary grade.

(a) Kindergarten training-schools should be affiliated with normal schools or universities where kindergarten students could be trained with teachers in all grades of education, sharing with them the general courses in philosophy, psychology, methodology, art, science, etc., taught by specialists, who have in mind the educational problem in its entirety.

While this is a vital need, there should also be a kindergarten training-teacher who helps the kindergarten students to see the relation of these studies to the particular problem of the kindergarten; they should be specifically applied to the kindergarten problem, after a survey of the broader field of the general educational situation presented in classes with students preparing for all other grades of education.

It is true that kindergarten training-schools have been separate and apart from education as a whole. The students were often taught Froebel, and Froebel only—his philosophy, his gifts, occupations, and games. The psychology and philosophy were studied in Froebel's Mother Play, etc., and students had no standards of comparison. They did not see Froebel in perspective, and know his place in the history of education; consequently they looked upon

him as the sole prophet of truth, slavishly following his letter rather than his spirit, and felt that any variation was heresy.

(b) The second need of the kindergarten movement is the co-operation of scholarly men, for it has been too exclusively a woman's movement. In the past the work was largely propagated and supported by boards of women, the instructors in the training-schools, the supervisors were women, and of course the work with the children had to be in the hands of women.

The practical ways in which the co-operation of men is needed are these:

First: A sympathetic, unbiased study of Froebel by professors of philosophy, psychology, and education. Too often we have Froebel dismissed with a few condescending paragraphs; we find him criticised unfairly, or, worse still, ignored entirely. Fortunately this attitude is already changing rapidly and the philosophy of Froebel is becoming the subject of fair, unbiased study by scholarly men, as well as women, who, in the light of the fact that they are not kindergartners, can more easily see Froebel impersonally, realizing his limitations as well as his genius.

Second: School superintendents and principals are needed who have studied Froebel. A large proportion of them at the present time know nothing of his real worth or equally real limitations, and consequently assume one of two attitudes; they either honestly state their ignorance regarding Froebel and the kindergarten, and leave the kindergartner to run things her own way, without the intelligent criticism given other teachers; or, thinking the whole kindergarten situation rather a farce, they criticise the idea unintelligently and ruthlessly. A school superintendent or principal who is capable of giving an intelligent helpful criticism to kindergartners under his supervision is rare.

(c) The next need of the kindergarten is intelligent co-operation with, and a more sympathetic relationship between, the kindergartner and the primary teacher. This can be brought about in two ways: (1) Every kindergartner should study primary methods and aims, so that she can work intelligently toward the primary grades, thus preventing a break in the child's development. (2) Every primary teacher should study something of the kindergarten, in order that she may know what to expect of the kindergarten child, and so be enabled to lead him on intelligently. In fact, the separate

training for kindergarten and primary teachers to the degree we have had it in the past should not exist. They ought to study much in common, and, in specializing, each should know, not only her own problems and methods, but those of the other. Until there exists this mutual insight and understanding we can neither expect intelligent co-operation between kindergarten and primary teachers, nor a bridging of the gulf between the kindergarten and the primary school.

(d) This last suggestion is given with some hesitation because one cannot be certain that the evils resulting might not be greater than the good which would follow. Nevertheless, it seems possible, provided supervisors could have good training in the theory and practice of both the kindergarten and primary grades, that a common supervisor could do much to unify the work of the two departments.

This would no doubt raise legitimate objections among kindergartners and primary teachers, unless the supervisor could be equally trained in the methods of both. It is true that, when this has been done in the past, if the supervisor has had training and experience in the primary alone, the kindergartens have been unduly sacrificed to the demands of the school. On the other hand, when the supervisor has had kindergarten training and experience without the same in primary work, too many methods of the kindergarten have crept into the grades, arresting the growth of the school children on the plane of play.

I believe that the kindergarten is the foundation of education, that it is no fad, that it has come into education to stay; but in order to place it in the right relation to the school system we must have the intelligent co-operation of superintendents, school principals, supervisors, primary teachers, and kindergartners. The kindergarten is in danger of becoming an excrescence instead of an organic part of the public-school system, and it will take the willing co-operation of all to make the bond between the kindergarten and school a truly organic one.

It is acknowledged that the kindergarten has suffered from its isolated position in education and developed many faults, but it has also carried a message of humanity into the field of education. Again, it is acknowledged that kindergartners have often been sentimental, but they have brought a motherly love into the school;

they may have resented criticism of their system of education, but they can never be charged with indifference; they may have been overenthusiastic, but they have ever been devoted to their work; they may be divided among themselves into different schools with many different aims and methods, but there is one point upon which all kindergarten schools stand forever united, and that is an intense devotion to the child and a loyal consecration to what each considers the child's highest good.

The motherly devotion and care bestowed upon childhood, irrespective of caste and position, by every kindergartner, no matter what school she represents, is something beyond price, and, as Davidson has said, any criticisms upon such work as this may be fair, but after all "they are only spots on the sun."

V

THE EVOLUTION OF THE KINDERGARTEN PROGRAM

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INTRODUCTION

The organization of a program, or course of study for any department of education presupposes a background, or foundation of principles which admit of universal application and adaptation. The kindergarten as a department of education has such a body of principles, and relates richly and harmoniously with the best prevailing systems of thought. Its philosophy is in harmony with the highest philosophic thinking. Its fundamental principle of organic unity—which is in keeping with the profoundest generalizations of scientific thought—is regulative of both its theory and practice. Its aims are in accord with its philosophy and principles, and reflect a world-view that is primarily spiritual and esthetic. Its psychology is genetic and dynamic. It recognizes evolution as the method by which the self progressively manifests itself and assimilates the nurture of a progressive experience to its own development. It accepts activity as the resident force that reveals the unitary life of the child, whose development depends upon two interrelated factors: first, the recognition of the child as a responsive agent capable of self-revelation and self-realization; second, the selection and arrangement of subject-matter or experience, educative materials, and activities as furnishing the situations or environment in which the growth and development of the agent takes place.

The kindergarten program records the efforts to synthesize into organic wholeness the philosophy, psychology, principles, aims, subject-matter, educative materials, activities, and methods of the system for the guidance of daily practice in the kindergarten. These efforts are characterized by limitations of knowledge and errors of judgment such as are found in the attempts that have been made to formulate courses of study for elementary grades of instruction. At best, the program represents the working hypothesis of the kinder-

garten proper, and is subject to criticism and reconstruction by the evolutionary method, as insight into the meaning of education is deepened by constant reflective thought, and clarified by conscientious practice. To formulate a program for the kindergarten based upon educational principles of universal validity and acceptance, the application of which shall minister to the essential needs of childhood; to enter the storehouse of human achievement and culture, and from its riches select and arrange suitable subject-matter for its development—constitutes a difficult and delicate task.

In the evolution of the kindergarten program—the movement of which can be traced from Friedrich Froebel, the founder of the kindergarten, to the present time—at least three conceptions of the subject are represented.

In the first conception may be seen an apotheosis of childhood. It accepts Froebel's major premise—that each human being in its unitary life is a child of Nature, a child of Man, a child of God. Only through self-activity can this threefold nature be revealed or realized; hence, the emphasis upon the child as the spiritually determining factor in the program. The relationships to nature and to man are co-ordinate factors the first of which demands a quantitative and qualitative key to unlock its mysteries—which is furnished by the gifts and occupations—while the second emphasizes human relationships through the experience content of daily life.

The second conception of the program accepts type aspects of experience as its determining factor. It regards the child as the bearer of a life in which are blended characteristics that are distinctly natural, human, and divine. It seems to regard the child as a concentration and conservation center; and seeks, through the selection and arrangement of subject-matter, to engraft upon the native stock of child-life, the scions of whatever is most "generic, historic, and characteristically human," making use of the gifts, occupations, and subject-matter in conformity to the fivefold aspects of human experience that represent the sciences and humanities.

The third conception of the program regards the child as its determining factor, not as an individual independent of experience—since in his corporate life he is a bearer of all experience—but as having a life endowed with "experience fulfilling" capacities. These endowments, through processes of realizations, reveal his heirship and indebtedness to a natural, human, and spiritual inheritance, and

at the same time vindicate his right to be called an individual, a person. This conception of the child as the center involves the presence in the program of the elements which give validity to his "experience fulfilling" capacities which are none other than the experiences of the life that now is and the experiences of race life. These experiences are the dual aspects of the subject-matter of the program, which, together with educative materials, are the means through which, in adjustment and adaptative processes, are realized both the individual and racial aims.

In the threefold movement that has developed the program as related to the kindergarten, we may discern a general position, or thesis, which regards child-life as the determining factor in the first; the antithesis of this position in the second—which regards subject-matter as the determining factor; while the third, regarding both as necessary factors, attempts to synthesize them into an organic whole. Divergent as these three conceptions are in many particulars, they are dominated alike by two constant factors: first, the immature human being, contributing energies and activities; and second, experiences as furnishing the situations in life to be interpreted in terms of truth and worth to and by the child. Each solution of the program thus far offered must be regarded as tentative, since the final issues of a course of study must wait, in large measure, upon the development of an epistemological interpretation of experience, to which the kindergarten shall contribute the insights gained in its attempt to interpret and meet the needs of childhood.

It is the purpose of this undertaking to present these three conceptions of the kindergarten program, stating their respective attitudes towards the child, the subject-matter, educative materials and methods, briefly indicating the implications and results of each point of view. The word "stating" is used by intention, since the subject is of such dimensions that the principles involved receive little more than statement; while the presuppositions and implications of the views presented, need extended explanations that are not warranted in this connection. Therefore, I can only hope to indicate the points of emphasis in the subject, fully appreciating the fact that an ideal solution of the course of study for the kindergarten, as the latest development of school, cannot thus early be accomplished, when the school proper still pursues its quest of an ideal curriculum. It is my purpose to indicate the directions in which thought and action

are moving in the kindergarten, with the hope that, although the general position assumed fails to meet approval, it may at least prepare the way for more general discussions of the office of the kindergarten in its relation to the child, and its articulation with the school system.

I

The First Conception of the Kindergarten Program is characterized by exceeding simplicity and informality, and on the side of subject-matter is marked by the absence of anything like a formulated, continuous scheme or plan. However, self-activity is accepted as the guiding principle of the kindergarten, and the activities of the children, in response to the conditions of environment and the seasonal changes of the year, furnish the point of departure for daily kindergarten procedure. Under this régime the educative materials—gifts and occupations—are used to foster self-activity in the children and to interpret the experiences of life as manifesting three typical groups of concepts; namely, concepts relative to human activities; concepts of number, form, position, and direction; concepts of symmetry, proportion, and beauty. The pendulum of method oscillates between the extremes of free play and dictation, with—strangely enough—the balance of emphasis being placed upon dictation and logical sequence in gift and occupation exercises.

It is probable that this first conception of kindergarten procedure dates back to Froebel's own time and practice, since one may search his writings in vain to find sanction for a set program—understanding the term to mean the sum total of prearranged experience that shall take place during a stated period. With Froebel, the activities of the children and the common experiences of daily life furnished the two dominant factors of kindergarten practice. Freedom and joyousness seem to have pervaded all his associations with children. There is no evidence that in his use of the educative materials with the children overemphasis was placed upon the elements of number, form, position, and direction; it is Froebel's *theory* of kindergarten materials that sanctions the embodiment of these elements in sequences of constructive building with the gifts, and "schools of work" with the occupations, that still burden the kindergarten—especially in its training-school aspects—with an amount of hand-work involving great loss of time and waste of energy that might be conserved to more profitable uses.

In the inception of the kindergarten in this country the gifts and occupations afforded the line of least resistance in the system. They were tangible, concrete objects to be mastered by means of mathematical and geometric formulas, and, hence, were elaborated and extended almost indefinitely; while the philosophic and psychological aspects of the system presented great difficulties, and received but partial and inadequate interpretation, the attitude toward them being that of unquestioning acceptance, rather than that of enlightened understanding.

Whatever may have been the practices of Froebel and his immediate followers, much of the early kindergarten procedure in this country embodied more of the spirit of Rousseau than of Froebel. Following the *child* as the determining factor, partial understanding and unquestioning acceptance of Froebel's idea that education must be far more passive and following than prescriptive and categorical created a sentimental attitude toward the child, and resulted in an absence of discipline which subjected the kindergarten to criticism that was as unjust to the spirit of Froebel, as it was salutary for the development of the kindergarten; while the use of the gifts and occupations in logical mathematical progression, minimized the purpose they were supposed to accomplish; namely, the development of true self-activity in children.

It is safe to assume that practice according to the first conception of the program is practically obsolete. Its limitations and failures were due, primarily, to the establishment of a dualism that, on the one hand, interpreted the child and his experiences in terms of feeling and emotion, and, on the other, interpreted the gifts and occupations of the kindergarten in terms of knowledge. With all its errors it contained the dynamic elements of truth that eventually demanded a relatively new interpretation and embodiment of the Froebel system.

II

The Second Conception of the Program in its philosophic and psychological foundations presents many points in direct antithesis to the first conception which is dominated by intuition rather than insight. In the first, self-activity is the psychological principle, by means of which *the child reveals himself*, and, under guidance, adapts the experiences of daily life to his own developing needs. In the second, self-activity is the regulative principle, through the func-

tioning of which the *child can be adjusted* to the fivefold riches of human experience. The preservation and transmission of universal experience seems to be its primary aim, and the development and interpretation of individual experience its secondary purpose. This conception of the program is a more or less conscious attempt to present to children the quantitative and qualitative aspects of experience; that is, to present the rudiments of time and space relations representing the sciences, and the generic ideals of human experience as they are revealed in literature, art, and the great divisions of institutional life, representing the humanities. Thus it becomes the office of instruction and training in the kindergarten, through the selection and arrangement of subject-matter and educative materials, to bring the child under the organized stimuli of typical experiences, the light and truth of which, pouring their radiance through the "five windows of the soul," shall become constitutive and regulative of its development.

Under this régime there are exceedingly definite ideas concerning the organized agencies of the kindergarten, and the method of making them effective. The child is subject to two co-ordinate lines of stimuli: first, typical human experiences which present concepts of deep significance; second, the gifts and occupations which are considered as materials of intrinsic worth, each gift and occupation having its own peculiar principles and laws to be demonstrated through play exercises. Method, under this plan, provides for a drastic separation between the experience content of the program and its educative materials. The situations and interests involved in the former in no way consciously condition the play exercises with the latter.

The first of these two classes of stimuli presents the experience content of the program in a selection of Froebel's "Mother Plays" which fall into five distinct groups. These plays are logical, not in the sense of being a time series, but in their movement from relatively simple to relatively complex experiences. The first group presents rudimentary aspects of movement, process, and time; e. g., "The Weather Vane," "Grass Mowing," "Tick Tack." The second group presents experiences involving form, size, and number; e. g., "The Family," "The Finger Piano," "The Target." The remaining three groups present human dependencies and obligations; e. g., the "Trade" plays, the "Light" songs, and the "Knight" songs. All of

these are elaborated by means of related stories, pictures, songs, and games.

The gifts and occupations constitute the second appeal to the child's activity. Exercises with these materials fall into three distinct groups; namely, exercises that emphasize human relationships, exercises that emphasize movement, change, number, form, position, and direction; and exercises that illustrate symmetry, balance, and proportion. Logical sequence is the regulative principle in the gifts and occupations, by means of which the formal ideas embodied in the series unfold in systematic order, moving from simple to relatively complex and elaborate ideas of form, size, number, position, and direction, all of which are clothed in alluring devices that they may be made interesting to children.

The method of using the gifts and occupations is primarily that of free play and suggestion—the method of discovery and investigation based upon the idea of “restricted freedom.” The child becomes, as it were, a discoverer; his freedom is restricted by the kind and amount of material presented for his play; and his activity, in response to the presented object, results in the discovery of the idea next in order in the logical sequence of the material; e. g., in the sequence of the materials, it becomes necessary to develop the right angle, and to illustrate contrast in size by laying a series of right angles with sticks measuring from one to five inches in length. The child is first presented with two sticks, and by playing with them and laying them in different ways he discovers many different forms which are named; e. g., tent, hammer, umbrella, flag. In the last example the child is supposed to have discovered the right angle. From this point the exercise concentrates upon the idea “angle.” The child is encouraged to lay the graduated series of five angles; other children are incited to do the same; these are again named; often they are grouped under the family idea—whose numbered unity is determined by five—and named “father angle, mother angle, brother, sister, and baby angle.” “In kindergartens where the logical geometric sequence of the gifts is held inviolate, the children play through exercises that emphasize sphere, cube, cylinder, square and oblong. They count faces, corners, and edges, first on the gifts, and then on objects around them. They discover vertical, horizontal, and oblique lines, angles and triangles of every description, while prisms—square,

triangular, rhomboidal, trapezoidal, etc.,—are made to develop in logical progression; and the road to discovery is so hedged about with limitations and restrictions that no element of chance enters to prevent the prearranged-for achievements.”¹ Song and play are the accompaniment of the gifts and occupation exercises, which leads one writer to say:

Slowly and gently, by many repetitions, may be sung sweetly into the child's awakening mind the fundamental concepts by means of which all after organizations of form, color, position, direction, size, and number are based, as well as all essential movements in space.²

Thus, through the selection and arrangement of typical experiences from the “Mother Play” with their related songs, stories, and games, and through the gifts and occupations with their emphasis upon the rudiments of knowledge of form, and number, the child is given a “rational insight into the world of nature and the world of man.”

It is undoubtedly true that sanctions for these theories and practices are found in Froebel's statements concerning the gifts and occupations with their emphasis on number, form, etc.³ The use of typical experiences selected, from the “Mother Play” also finds sanction in the fact that the aim of the “Mother Play” is to present to mothers and teachers the philosophy of the system as it is reflected in concrete, isolated experiences of child-life; and also in the secondary purpose of the book which is to preserve to the child a too easily forgotten past. The fact that Froebel looked upon it as his highest achievement, and used it in his classes, gives to the practice an added sanction.

In attempting to summarize the second conception of the program, its primary characteristic arrests attention at the outset. Here, all is certainty. Here is a guiding principle, namely, the Universal determines and conditions the Individual. By this plan of action, childish experiences are dislodged, as it were, from their solidarity in the serial experience of life. The correlative experiences are selected from the “Mother Play,” the selection being

¹ For fuller treatment of this subject, see my article “The Kindergarten Gifts,” in *Teachers College Record*, November, 1904.

² *Kindergarten Building Gifts*, by Elizabeth Harrison, p. 6.

³ See *Pedagogics of the Kindergarten*, chaps. 5, 7, 9, and others.

determined by the standards of the universal and necessary, and also by the standards of the truths and worths they embody. Their arrangement is logical with reference to their "relative simplicity and ease of acquisition" by the child. In other words, these universal truths and worths must be broken into fragments in order that they may be made prepotent in the unfolding life of the child through the functioning of his activities in adjustment processes of mimetic and repetitive character. The child is conducted *from* his immediate and unevaluated experience into the pre-existing and predetermined universal experience of the "Mother Play" which conditions the experience, particular or individual.

The element of certainty may again be noted in the necessary definiteness of its starting-points, that take some natural experience in the world at large, or some induced experience in the kindergarten, as the point of departure. Definiteness of goal, or aim to be realized, is found in the *significance of certain universal truths* embodied in the typical experience of a related "Mother Play." Songs, pictures, stories, and plays are used to enhance this universal significance. Each embodiment or setting of the idea is a *particular* to be apprehended as conditioned by the universal truth. The number of "Mother Plays" used during one year varies; but, great or small, their use according to this plan necessitates successive points of departure, and the establishment of successive goals to be achieved. The implication is that each achievement is a new determination involving a new point of departure, a new goal to be achieved, *ad finem*. But where is the guarantee that the goal has been achieved? Have these initiations and excitations been translated into any adequate system of purposes or transformed into working power for their realization? The inference is that they have not, since method in this plan maintains a separation between the experience content of the program and its educative materials, and thus shuts the child away from the most adequate means by which the experience can be "psychologized," i. e., "turned over and translated into the immediate and individual experiencing within which it has its origin and significance."⁴

Does not the rational and logical development of experience in this conception of the program, with its emphasis upon the universal significance of the *ideas* involved, articulate with the general intel-

⁴ See *The Child and the Curriculum*, by Dr. John Dewey, p. 29.

lectual position of Herbart, rather than the general voluntaristic position which implies a more or less conscious recognition of the presence of an integrating, practical end for all activities?

The second characteristic of this conception of the program is noted in the dualism maintained between the foregoing experience content and the gifts and occupations; and also in the triple separation that is maintained within the latter series, in the so-called, life, beauty, and knowledge forms. The primary dualism has been touched upon in an earlier statement. It is by conscious intent that the experience content and the gifts and occupations are held as independent realities, the functional significance of which pertains to two distinct realms represented by humanity and nature. Method with the gifts and occupations is conditioned by the perceptual activities of the child and the structural aspects of the materials. In the play exercises with the gifts and occupations there is constant appeal made to perceptual consciousness by the presentation of additional materials and technical elements of universal import. The responsive energy of the child is conditioned by universal, independent energies of form, number, etc., which are imbedded in the logical sequence of materials. Constant handling of kindergarten materials that present these universal factors to perceptual consciousness is to the end that their cogencies may become constitutive and regulative of child-development. Both experience content and educative materials, in their respective isolations, are bearers of universal ideas that condition and determine the course of individual energies and must be made increasingly potent, as through successive differentiations and integrations the developing soul pursues its quest of freedom.

Over against such a plan of action, with its consciously arranged separations, are set the limitations of the child whose tendencies and reactions have psychological rather than logical determinants. The child seeks and finds unity within the circle of his own experience, or he can bridge the gaps that separate him from the relatively unknown experience, real or imaginary, at a single bound, caring naught for distance, nor feeling any need to traverse the seried steps that intervene between him and the object of his desire and activity. The implicit freedom to traverse the universe at will, gives to childhood its uniqueness, and shapes its first interrogation of experience in the question, What? Childhood has its golden

age of acceptance wherein all truth, beauty, and goodness are open before it, and needs neither adult logic nor adult interpretation for its fulfilment. It is the period of unconscious tuition, in which, through the unitary life of feeling, is laid the foundation for the development of the intellect and will.

In its second interrogation of experience, childhood asks the why of things. Having built a unitary world on the basis of its first interrogation, it seeks to transcend its own interpretation of that world by the question, Why? This indicates that feelings of meaning are shaping its unitary life into some system of purposes. Does not this question at this time demand answers in terms of [feelings of] meaning rather than in terms of knowledge? Is it not in thinking the child a miniature adult with all the capacities and capabilities of the adult written small that leads to the practice of separating knowledge into fragments for the child, and then assisting him to rebuild by accretion the temple of knowledge, by concentrating first on one fragment and then on another? The practice of morselizing experience according to the principle of "relative simplicity and ease of acquisition" is an attempt to meet the needs of child nature. These fragments of rudimentary knowledge may seem valuable from the adult standpoint, but can the average child of five years of age perceive or conceive their significance, or establish relations between them? Is it a "necessary characteristic of primary and elementary instruction that it must take the world of human learning in fragments, and fail to give its pupils an insight into the interrelations of things?"⁵ Is it not the tacit

⁵ *Psychologic Foundations of Education*, by William T. Harris, p. 335.

acknowledgment of the inability of the child to perform relating activities that leads to the practice of clothing the—in itself—uninteresting fragment of knowledge in a garment of device? May not the teacher be laboring under the self-deception that the children are getting the kernel of truth, when in reality they are feeding only upon its husks? Is it not just this necessity of making interesting that which is in itself uninteresting, that has made the teacher, too often, a neophyte in method and a master of device? And have we not here the primary conditions that result in overstimulation on the one hand, and stultifying inertia on the other?

Again, may not the practice of constantly appealing to perceptual consciousness, with its concomitant activities, tend to arrest

the child upon the plane that demands constantly increasing external stimuli?⁶ The "passive impressibility" of childhood is not a condition to be cultivated, but rather to be eradicated by educative activities. Furthermore, may not the very perfection of the kindergarten materials that yield such facile results, leave the child—inured to such achievements—helpless and overwhelmed when less perfect and facile materials are put into his hands? In this connection, one may question whether the method that restricts freedom to the discovery of the formal ideas in the series and reproductive activities, and that seldom establishes aims to be consciously realized by means of these materials, furnishes adequate training; since it leads the child captive to knowledge that can give no rational account of itself to his consciousness. Having no real insight into the truths thus acquired, the child lives and acts a pallid and unreal part, since reason and understanding are necessarily lacking.

Within the series of gifts and occupations with their separate classes of exercises—those that emphasize life-forms, again beauty, and yet again knowledge forms—one may detect a survival of something akin to faculty psychology. To seek to develop these, then, as distinct, is to work by the methods of an obsolescent science. Beauty and knowledge as factors in human development took their rise *within the life-processes*; and unless the little child again finds them

⁶ The following incident took place in New York City, with a group of nineteen medium-class children whose average age was, apparently, five and one-half years. The materials used in the exercise were the third and fourth gifts in combination. Noting, especially, the work of one well-developed boy, I counted fifty-eight modifications of the materials in the first three minutes of an exercise that lasted one-half hour. Throughout the entire period the stream of perceptual activity flowed unchecked and unevaluated through consciousness. The objects of activity were experienced, as they came and went, with no other purpose than to follow the teacher's suggestion, "see how many things you can make with your blocks." These activities continued throughout the entire period, being interrupted occasionally to name a form, but without interpretation of any kind. The work was individualistic in the extreme, the social spirit being entirely lacking. The modifications of the materials in this single period ran into thousands, and, so far as I could judge, left only a taste for amusement. No doubt the children "discovered the possibilities of their materials," but possibilities yoked to no higher service than perceptual control by motor activity alone is of doubtful value in a scheme of purposeful education. This observation could be multiplied by hundreds of similar character. In this class of exercises I find a tendency to habituate the mind's responses to the immediate objects of sense impression, which retards the development of higher possibilities.

there, he may seek them elsewhere in vain. The artistic elements of regularity, symmetry, and harmony must be the *outcome* of human situations and interests. To give them separate embodiment and expression, and expect appreciation would imply a degree of psychological development rarely attained by a child at kindergarten age.

Assuming, at the outset, that the child is a being to be adjusted to the typical aspects of life under a fivefold classification, progression may be made in systematic and logical order from simple to very complex situations in life; yet, however adequate these situations may seem from the adult standpoint, they fail in the presence of the psychogenetic problems of child-development, since a child's experience can never be deciphered by the mechanical categories of causality, time, and space, or by number, form, position, and direction; nor can the perfected charts of typical human experience take the place of personal excursions into the immediate fields of human interests that condition the child's life, nor can control over the former take the place of intelligent control over the latter.

Again, while this method of maintaining a conscious dualism between the experience content and the exercises with gifts and occupations, and also the separation within the latter series, is undoubtedly sanctioned by Froebel, is not the principle involved in direct opposition to his general monistic position? And in emphasizing this dualism both in the theory and practice of the kindergarten, is there not danger of perpetuating one of the primary inconsistencies of the Froebel system? An unbiased study of Froebel's general position reveals that as the child gets at human nature through human life, through a human medium; so "the child gets at nature through human life, through a human medium."¹

And, finally, are these experiences such as will enable the child to enter upon his primary-school work, without encountering serious obstacles that call for an entire readjustment of thought and behavior? The habit of instantaneous response to situations in the kindergarten does not always merge happily into the consciously reflective response required in the first grade. From kindergartens where the habitude of realizing consciously conceived aims has received only minimum development, the child passes into a realm

¹ Dr. John A. MacVannel, in *Teachers College Record* for September, 1905, points out some of the implications of this dualistic position as inconsistent with the general philosophical position fundamental to Froebel's system.

characterized by two very definite aims; namely, to learn to read, and to learn to write, which calls for concentration, attention, and more or less inhibition of motor activities. After the ever-shifting procession of typical experiences with their varied appeal to perceptual consciousness, and the experiences with kindergarten materials in great variety, it is almost unavoidable that there comes a period of readjustment, during which the child may assume a *blasé* attitude towards the undoubtedly simpler curriculum of the primary school. In more or less modified form, this second conception of the program governs the practice in many kindergartens at the present time. It presents strong points in contrast with the first conception, and has performed a very necessary part in the development of the work. But too strict adherence to this conception may hinder the development of the kindergarten. If the basic idea of the kindergarten is truly great, it will attest that greatness by growing, and—if need be—by outgrowing all its earlier formulas. If, in this process of growth, many Froebelian features of the kindergarten are eliminated, it is because the reach of Froebel's spirit is greater than any of its present crude embodiments.

III

The development of the Third Conception of the Kindergarten Program was conditioned by at least four prime factors: (1) that all education must be relative to the society in which it is given; (2) the scientific generalizations of evolution that resulted in a widespread interest in child-development; (3) the growth of idealism as a principle of interpretation that "affirms the organic unity of experience;" (4) a rational study of Froebel that revealed the essentially dynamic character of the principles underlying the kindergarten.

The third conception of the program, seeking a new determination for thought and action, attempts to synthesize the ideals of earlier programs into an organic unity. It interprets the generic idea in each plan—the self-activity and capacity for joyous response of the child to stimuli that obtains in the first, and the dignity and riches of typical human experience that dominates the second—to be terminal aspects of one unitary process of experience or reality, either of which is meaningless without the other. Hence, there are no hard and fast distinctions between the child as the object of the

educative process and human experience as its subject-matter. Method, by this plan, is conceived as the outcome of interaction and interrelation processes between the undeveloped human being and the facts and worths in his inheritance of race experience. In the third plan, the child is recognized as the agent of his own self-revelation and self-realization, the bearer of instincts and impulses, tendencies and aptitudes, which are the "given" dynamic factors of human life. These factors function into processes by which the individual responds to his environment and adapts it to his own developing needs. And, further, this plan recognizes civilization and society as furnishing the situations or environment into which life must function, both for its acquisition of the world of knowledge, or fact, and the world of appreciation, or interpretation.

THE PSYCHOLOGICAL BASIS

Here we are at once confronted with questions of profound import. How, or in what, does knowledge take its rise, and how account for the "feelings of meaning" which are its invariable accompaniment? What do we know of the genesis of experience, and how does the vague continuum of the child's sensory experience become differentiated into presentations of perceptual and conceptual import? The ideal course of study for the kindergarten, as for the school, waits upon the solution of these problems and others of equally obscure nature. The best that can be done is to determine, as carefully as possible, the constant factors involved in experience processes, and upon these build a working hypothesis for the kindergarten.

Experience presents three constant factors; namely, unity, activity, and development. The unity of experience exists, not for some thing, but for "a person" for whom it constitutes a possession indissolubly linked with a self that is changing, yet permanent, in an environment dominated by the same characteristics. Activity is the productive method of experience both in its changing and permanent aspects, and leads to development processes within which it is possible to discern a threefold, yet one movement: (1) the *unfolding* of individual life from within from "inner necessity"—which, in its nascent stages, functions through instinctive and impulsive forces that, under the development of reason and judgment, tend to pass into conscious control; (2) the *infolding* of an environ-

ment that is conditioned by the developed products of human experience, or civilization, to which individual experience must become adjusted. These unconscious and conscious infolding and adjustment processes make for the conservation and perpetuation of the past. (3) This movement presents the adaptive activities of the individual—the manifestation of the “propensities to variation,” upon the functioning of which the progress of civilization depends, revealing man and humanity as in process of becoming.

This third movement is the limit-transcending power that enables the aspiring soul to say:

Build thee more stately mansions, O my soul,
As the swift seasons roll!
Leave thy low-vaulted past!
Let each new temple, nobler than the last,
Shut thee from heaven with a dome more vast,
Till thou at length art free
Leaving thine outgrown shell by life's unresting sea.

The kindergarten philosophy accepts as its working hypothesis, the unitary character of experience in its individual and racial aspects, the solidarity and elasticity of which are maintained by its constant factors of unity, activity, and development. Education, natural and telic, is conceived as the integrating or mediating factor between the individual and racial aspects of experience. To admit the possibility of mediation is to acknowledge essential identity between the factors to be mediated. Froebel writes:

Where mediation takes place there is always identity in some respects at the foundation of what is mediated, but the identity appears in the opposite way; or, in other words, mediation presupposes opposition in appearance, but identity in nature—that is, mediation can only take place between and with opposites which are yet identical.

The kindergarten stands first in the system of mediating agencies of telic education. Its office is to aid the undeveloped being in his self-initiated efforts to control and interpret experience by encouraging suitable reactions to a carefully selected environment and suitable educative materials; by mediating between the home with its more or less conscious tuition of child-life on the one side, and the purposeful, conscious education of school on the other. Accepting unity as its productive principle, kindergarten procedure must have its retrospective, immediate, and prospective references. It must

avail itself of what has been formative in child-life during pre-kindergarten days, for the adequate fulfilment of present needs as preparatory to the next stage of development.

The third conception of the kindergarten program is an attempt to take the experience processes and products of early childhood and give some rational account of them as revealing the dominant characteristics of this period. These early experience processes and products are to be interpreted and evaluated by the standards of the larger experience unit—civilization. This plan assumes that the child does not come to kindergarten with an achieved self, or an organized body of experience. The child of five years of age has begun all the processes involved in achievement; but feeling is regnant, thought is conditioned by the immediate presentations of the senses, and "the child's will is his unthinking response to his uppermost idea." The young child's mental life has the character of "consecution"—to use Leibniz' word—wherein is registered an infinite number of impressions; it is a vague continuum or flow of sensational, perceptual, and very rudimentary conceptual activity.

The child's first feeble control of the course of experience lies in the activity of perceptual consciousness, with its true correlative of restless physical activity which is not merely an accompaniment of perceptual consciousness, but is the very condition of its development. In the early stages of child-development, the stream of perceptual activity flows practically unchecked through consciousness, subject to little or no evaluation save as it is detained for an instant for recognition and naming as one of the constituent objects of the environment. On this plane of development everything is equal to everything else. The child's language, play, and expressive acts mirror exactly the staccato character of his mental condition. In language, he is satisfied with a naming control of the objects he sees. In play, he contents himself with many repetitions of a new-found power or experience; such as repetitions of syllables and sounds, or repetitions of activities and movements by which the physical body becomes a part of the objective world and is thus brought gradually under control. Or again, the child moves rapidly from one amusement to another, his activities being conditioned by the presence of perceived objects. Gradually, however, the implicit unity of experience that constitutes the child's world on the plane of sensation is differentiated through perceptual activity, and becomes

increasingly explicit under the aspect of things. "The unity and distinct behavior of the individual thing is for it (perceptual consciousness), unconditional and ultimate."⁸ With the emergence into consciousness of the definitely perceived object, there stirs within the individual a vague feeling of distinction between itself and the objects it perceives. This vague feeling of distinction is the dynamic factor in perception which leads to the level of conception wherein the unity of consciousness becomes organized into system and relations accompanied by the recognition of self and not-self.

A thorough study of the significance and implications of the perceptual stage of human development reveals the presence of the normative elements involved in the construction of an ideal self and an ideal world. Perceptual activity, as a factor in human development, cannot be overlooked. It must be clearly understood and used, not as an end in itself, but as a means by which experience is carried up to the level of thought, to be subjected to the constructive activities of conceptual consciousness. To use as an end would lead to arrested development on this plane. Lives of the feeble-minded and idiotic are a constant witness to control by perceptual consciousness.

Although the normal child's life is under the domination of perceptual consciousness, it needs but little observation to discern the presence of rudimentary conceptual activity. Very early, life begins to take on purposes. The child "takes himself into his own hands" and seeks to interpret and control the course of experience. His futile attempts, his hasty generalizations, and general instability of action, arising partially from his lack of perspective, gives to the purposeful education of the kindergarten its primary determinations.

In order to facilitate the self-initiated efforts of the child to control the course of experience it becomes necessary to search the past of child-life for experiences of unimpeachable validity, and, by guiding the child into some conscious control of them, begin the development of a "vigorous faith" as a basis for present achievement, and the foundation for subsequent development.* A retrospective reference to pre-kindergarten days shows that the child

* Stout's *Manual of Psychology*, p. 319.

* See *Commentaries of Froebel's Mother Play*, translated by Miss Blow, p. 69.

has been under the stimuli of an environment arranged mainly with reference to adult appreciation and well-being. His time has been largely spent in adult companionship; he has listened to conversations that were to him a strange jargon of meaningless words; he has witnessed behavior that was inexplicable to his reason and judgment; the world of nature has formed a part of the pageantry of life that has moved swiftly and steadily from day to day. In this "vertigo of conscious life" the child's mind has flitted with bird-like rapidity from one impression to another, while his motor response has reflected the same flitting tendency and characteristic.

The child has no organized body of knowledge to which the teacher may appeal; the kindergarten has no studies—in the narrow use of the term—as a basis for instruction and training. The experiences of pre-kindergarten days must, in large measure, furnish the subject-matter for the program, since they are fundamental to the understanding and interpretation of the immediate experiences of the kindergarten. The child has begun the life of control in response to a varied experience that he can in no adequate fashion interpret or evaluate. There must be a winnowing and sifting of these pre-kindergarten experiences, many of which are neither timely, nor worthy to become a permanent possession to the child. Nor can childish experience alone furnish the standard or principle for selection and arrangement of subject-matter for the program. This principle must be found elsewhere. It must be a principle that has enduring validity and universal application, it must be as clear when written in small characters in harmony with child-life as when written in characters that span centuries of civilization.

Turning to the child itself for a guiding principle, we can affirm that the child is human and essentially social; his world is a world of persons as well as things; his desire for recognition is, "at all times, the deepest hunger of the human soul"¹⁰ and can be satisfied only through his reactions to persons. The child seeks to unify himself with the object of his desire by means of imitation, which is manifested in language, play, and the constructive and expressive activities. Later, his desire takes that form of "social opposition" which compels recognition by "contrasting one's self with one's fellows in behavior, in opinion and in power."¹¹

¹⁰ *Symbolic Education*, by Susan Blow, p. 112.

¹¹ *Outlines of Psychology*, by Josiah Royce, p. 277.

THE SOCIOLOGIC BASIS

When the child enters the kindergarten he passes into a new world conditioned by two prime factors for his development and progress in the life of control; namely, community and environment. He enters into the companionship of many children of his own age, with interests and activities relatively similar to his own; and there stirs within the child the "consciousness of kind" that gradually comes to the recognition that in his response to the common bond, the common good, the common will of the community, lies the conditions of his happiness and the fulfilment of his desires. Here, in a selected environment arranged in sole reference to child-needs, is the arena for the normal expression of the dominant activities of child-life. In the child's unconscious and conscious reactions to an environment conditioned by human interests, we may discern the working of a preponderate principle of Humanitarianism¹² as regulative of the child's efforts in the selection, arrangement, and control of the course of his experience.

Turning now to the progress of Civilization—understanding the term to mean "the organization of human life thus far attained"—for a guiding principle we may learn, from history and social philosophy, that its evolution has been marked by distinguishing characteristics in three distinct stages, none of which is obsolete; namely, the Age of Militarism, the Age of Industry, and the Age of Humanitarianism.

The Age of Militarism called for the subjugation of the self to the idea of obedience and submission to authority. Obsolete and obsolescent civilizations are a witness to the fact that within the "solid unity" of Militarism are the elements of its disintegration and overthrow. In the state of continuous warfare and in the subjugation of alien communities and peoples, which created slavery and established within society the two classes of bond and free men, we may trace the conditions that define the problem of labor and eventually developed into the Age of Industry—an age of invention wherein the boundaries of thought, space, and time receded before the interrogating, investigating spirit of humanity.

¹² The term "Humanitarian" designates the principle that all that exists is essentially bound up in the nature, needs, interests, and aims of human life. It is a productive principle that yields a progressive realization of an indwelling spiritual essence increasingly manifest in both nature and humanity.

Its characteristics are great resourcefulness and great wastefulness. To humanity it brought great benefactions as well as great perplexities and conflicts in every field of life. Its greed of material wealth and its violation of the right of property, have been, and are, the very forces that make for its reconstruction. Bondage to mechanical conditions under an Industrial régime is no more compatible with human spirit than bondage to authority and tradition under the reign of Militarism. Not only are the disintegrating and negative elements present within each age, but the dynamic elements of the freedom-seeking spirit of humanity have also been the constant factors in each age, which have carried civilization into the third and highest stage yet attained—the Age of Humanitarianism. Great benefactions, philanthropies, and great public enterprises for the uplift of humanity are among the witnesses to its reality. Not the acquisition of material wealth, nor the maintenance of material power, but the “Humanization of Mankind,” is its keynote.

Again, seeking guidance in the realm of child-life, we find that his interests have taken their rise in the institution of Home and the life of the family, and in Nature as its most fruitful relationship.

Interrogating Civilization once more to ascertain the elements that have been persistently formative in the life of the race, we find that Home with its family life has been the most constant factor. Against this great source of race nurture and integrity, the Age of Militarism and the Age of Industry have beaten in vain. “The unit of the family still retains its integrity, and home is now, as it has ever been, the primary school for character of mankind.” In each Age, also, Nature has been the beneficent instructor of humanity, yielding her beauty, nurture, and resourcefulness for the increasing inspiration and service of the race.”

Thus in the nature and needs of the child and in the arena of his little life, and also in the highest reach of civilization with its most constant factors—home and nature—is revealed the principle of Humanitarianism by which to select and arrange the subject-matter of the kindergarten program. Not only is this principle adequate as a basis for the selection and arrangement of subject-matter, it also furnishes a standard for evaluating the

¹¹ See *Introduction to Social Philosophy*, by MacKenzie.

instinctive and impulsive activities of the child, and may determine the selection of those most valuable and helpful to his development.

Froebel names four primary activities that reveal the nature and needs of the child and condition his development; namely, the talking, the playing, the investigating, and the drawing impulses, through the functioning of which physical, intellectual, and moral control takes place.¹⁴ Modern psychology but corroborates this view when it subjects the total output of instinctive and impulsive activities to the test of worth in order to ascertain those that are primarily involved in the development processes, and are most available to purposive education. In broad outline they may be classified as the language, constructive, investigative, and expressive, or art impulses.¹⁵ The child furnishes the energy; but society, through purposive education, selects the situations of human experience as the functioning medium. A single instance will suffice to illustrate this thought; the impulse on the part of the child to utter sound is manifestly self-initiated and clearly a mode of self-expression; but society, or civilization, must supply the words and invest them with meaning. Thus the kindergarten, representing the first stage of purposive education, recognizes the child as the agent of dynamic, instinctive, and impulsive forces; but the opportunities for their functioning must be supplied by the program in a selection and arrangement of the child's experiences, as containing the norm and the possibilities of development into the larger unit of race experience.

Specifically, the experiences of home, the changing aspects of nature, and the great festival days of the year, are all familiar phases of pre-kindergarten life; but through reliving them; finding them the center of common thought and action for the present life of the kindergarten; talking and playing about them, and expressing them through constructive and graphic materials, the life of conscious control of a selected experience develops and becomes a personal possession of enduring validity to each child. Keeping within the unity of home, and nature in its relation to home life, the various exercises of the kindergarten—its songs, stories, plays, games, gifts, and occupations—take on the essential

¹⁴ *Education of Man*, pp. 49-93.

¹⁵ See *School and Society*, by Dr. John Dewey, chap. 2.

character of studies, since they are the means by which the "individual gains control over, and help in the interpretation of his own experience."¹⁶

But the office of the kindergarten is not fulfilled by selecting suitable experiences and educative materials as stimuli for childish activities. The experiences of childhood must not only be organized, they must be amplified, enriched, and corrected by means of the riches of human experience as represented in art, music, and literature. In beautiful pictures, the child may see himself and his interests projected as upon a screen. In music and song the feelings of meaning that stir within the mind become articulate. In the story, which presents the known experience in an ideal form, the child may leave the field of personal experience, and enter the storehouse of race-experience, from which he may return with a measure for his own life and spirit. The movement that began in the concrete experience of the child's own world has gone out into the related unknown and returned freighted with an increase of joy in a world whose enriched content expands heart and soul, strengthens the mind, and unfolds life in power and freedom. "Thus the pupil in a great meandering circuit has returned to the home from which he started on his explorations of nature and the outer world, has returned to the center of all earthly human endeavor."¹⁷ Out of the remembered past, in the social relationships of the present, and in the forward reach of the mind, the factors of conscious development evolve, begin their functioning, and institute the life of purposeful control of experience, marking the beginning of that ideal construction of self that fashions thought and behavior in harmony with the requirements of the environment, which includes the relationship of the individual to other selves and their relationship to him.

There is no warrant for introducing into the kindergarten, materials and experiences that have no functional value in either retrospective or immediate reference to child-development. It is conscious control of what has been and now is that constitutes the problem of the kindergarten. In the movement that harmonizes these two aspects of experience is generated the prospective refer-

¹⁶ See "College Course in Principles of Education," by Dr. MacVannel, in *School Record*, February, 1906.

¹⁷ *Education of Man*, p. 261.

ence of the program, since "that which is intrinsically best in any particular stage of development is the best possible preparation for the stage that is to come."¹⁸

The third conception of the program makes use of the gifts and occupations as means, and not as ends in themselves. In truth they are all occupations, since in the hands of children they are the means of expressing some form of human experience, whether it be building (plays with blocks), modeling in clay or sand, sewing, weaving, cutting, painting, or drawing. They are the materials by means of which the child may express himself. They facilitate physical development, and they further the development of constructive and artistic impulses. Their functional significance in furthering the processes of control is fundamental; and the structural elements of form, number, position, and direction are subordinate to the vital interests of the experience content of the program. In the natural constructive and graphic plays of children, object-forms predominate over those of knowledge—form, size, etc., or of beauty—forms of symmetry and proportion. Wherever forms of knowledge or symmetry appear they are considered incidental to the life-forms, which, from the child's standpoint, are the centralizing element throughout.

METHOD AND ITS DETERMINATION

The principle that determines the attitude towards the child, and the selection of subject-matter and educative materials, determines also the method. It is in the light of the aim of the kindergarten and its place in the educational system that method becomes intelligible as measures, or plans of action for the control of experience, initiated by the child and supplemented by guidance that distinguishes clearly between method and device.

Method is conceived as the way in which certain mentally conditioned tendencies of the child arise and gradually eliminate excessive restless and aimless response, in favor of increasingly purposeful measures of control. (This movement of method can be traced in imitative reactions, in constructive and graphic activities, in the acquisition of language, etc.) Eagerness, restlessness, and persistent action accompany the child's efforts to control experience. Herein lies the sanction of the teacher's office,

¹⁸ *Meanings of Education*, by Dr. Butler, p. 146.

which is to devise ways and means—both in the selection and arrangement of subject-matter and in the use of educative materials—that shall facilitate the child's method of organization of experience. Device, in education, under this régime loses its stigma, since it is the teacher's plan of action in response to the child's initiative. The given experience or situation to be controlled is the factor that calls forth "rational interest." The ways and means of expression, as facilitating control of the given situation, must be absolutely conditioned by the character of the child's initiative and the nature of the given experience.

In the third conception of the program, the gifts and occupations are the ways and means used in the kindergarten for the functioning of childish activities, in which it is possible to trace the evolution of conscious purpose. Activities that begin in free play and aimless response pass into self-imitation, and from imitation of self to imitation of others. This stage is marked by increasing susceptibility to suggestion, which gradually passes into the stage wherein the will can withhold action and accept direction, until, finally, the child moves again into free play that is no longer aimless but purposeful. In the evolution of conscious purpose the child is given opportunities for inventing plans. Powers of concentration and will are exercised in executing them. Skill and judgment are constantly developed in constructive plays, and in the comparison, by the child, of the results of his own play with that of others. Method is flexible when it utilizes the child's initiations, and permits their free expression in spelling out, through play, the meanings of experience, real or vicarious. The teacher is a master of method in being "far more passive and following than categorical and prescriptive." In her dual office as guide and interpreter she can evaluate the activities of the child's experience in the light of the larger unit of race-experience; she can guide the child in the exercise of powers whose functioning best fulfils the conditions of his development; and by means of suggestion and correction she can lead the child to clearer thinking, and to consciously controlled activities.

RESTATEMENT OF AIMS AND GUIDING PRINCIPLES

It is clear, then, that the kindergarten does not exist for itself, but for a purpose. Its office is not final; it is mediatory and

transitional. Past experiences of childhood are here re-collected, reproduced, and reconstructed. The present life of the kindergarten must be reinforced and interpreted by these previously familiar experiences. Past and present experiences are, alike, to be substantialized and enriched by the related experiences of the race. Materials and devices are but ways and means to the increasing control of self and the organization of experience—and all to what end? That each child may become, in reality, what he is potentially—a center of freedom, self-controlled under conditions that he can only partially control.

Dominated by the principle of Humanitarianism, the third conception of the program finds, in the distinctly human aspects of individual and race-experience, an indissoluble unity. On the side of the individual, the differentiating and integrating factors are psychological attitudes and activities—experience-fulfilling capacities. On the side of the race, the differentiating and integrating factors are sociological activities and values. To insist that either one—the child or the race—is ultimate, is to rob the remaining one of its vital coefficient. Had the race no patrimony to transmit; had posterity no capacity to receive and transform its inheritance into an ascending knowledge and appreciation, the history of civilization, as a record of human struggle and achievement, had never been written. The educational position that recognizes the essential unity and necessary interaction between these organically related factors makes for *a wise conservatism and a rational progress*.

THE PROSPECTIVE REFERENCE OF THE KINDERGARTEN

Turning now to the prospective reference of the kindergarten under this régime, many practical questions arise. From the side of school, what are the results of this conception of the program? What benefits accrue to the child from the tuition of the kindergarten? Shall his promotion to the primary school be determined by the standards of knowledge or the standard of behavior? From the standpoint of the third conception of the program, the standard for promotion is both behavior and knowledge. First, behavior, in that the child has a developed capacity for joyous response to the demands of each new development of experience. In the kindergarten the child has had the opportunity of co-operating and

participating in a common social life with his fellows; he has acquired habits of obedience, of cheerfulness, of courtesy, of kindness; and he has been subject to conditions that called for "the gradual substitution of an integrating end of conduct, for the mere pull and push of desire, as the cause of action."¹⁰ Second, experience—knowledge, in that the child carries into the primary school a partially organized body of experience concerning the common interests of home and nature, with a related body of songs and stories, over which he has some language and esthetic control. His ideas of number and form are concrete rather than abstract, their function having been to designate, in relation to practical ends, the educative materials of the kindergarten. Thus equipped, the child is ready to begin the conventional control of experience that characterizes the next stage of his development, which is provided for in the elementary school. It will be joy enough to read and write about the experiences with which he is familiar, and to find the activities of the kindergarten constantly enriched by the more definite lines of manual and art work. Thus, in the conventional control of the experiences of the kindergarten through reading and writing—as in the kindergarten, the child gained practical control over the experiences that were fundamental to pre-kindergarten days—one may discern the working of the productive principle of organic unity that yields progressive development. "Out of the previously familiar there emerges the quantitatively and qualitatively new experience." Thus the kindergarten fulfils its mediatory office in the scheme of purposeful education, and the separation between home and school is effectually and happily bridged.

In the meaning of the kindergarten lies its aims. Its purposes are defined in terms of humanity, and are distinctly social. It is a society in which each member is under an evolutionary process that defines the characteristic of a "socialized individual." The dominant physical activities and the mental initiations of the individual furnish the energies that make for social control; while the corporate life of the kindergarten—including its membership and all other agencies—furnishes the medium or culture ground for the development of the human, social capacities of the individual. The kindergarten seeks to preserve and make increasingly definite the

¹⁰ *Moral Education*, by Edward Howard Griggs, p. 40.

social aspects of pre-kindergarten experience. The emphasis placed upon language and constructive and graphic expression is for social, rather than intellectual, control of experience. Intellectual control is incidental, not accidental to the social and ethical purposes. Not only are the relationships to humanity dominated by the social ideal, but human relationships to nature are presented as essentially social and ethical. It is, first, a world of beauty and appreciation, and, second, a world of act and description; neither of which can be separated from the dominant social point of view.

The impulses and "experience fulfilling capacities" are the child's own, manifested in his eager, persistent activities to control self and his environment. The kindergarten exists to recognize and encourage "the impulse to self-culture and self-instruction through self-shaping, self-observation, and self-testing." It exists to mediate to the child the stories of spiritual interests and values incarnate in human experience, by which the individual may validate and fulfil the potentialities of his being. The kindergarten is under the propulsion of the principle of unity which affirms that life is all of one piece. It is regarded as one factor in the system of purposeful education, and exists for the purpose of making the implicit unity of experience increasingly explicit and formative in the life of each member of the kindergarten, not by a process of engrafting or inoculating, but by processes of development and growth. Development is not considered as static reconstruction or reproduction, but, rather, as dynamic reconstruction and reproduction in harmony with each advancing stage of society. Growth is the factor that reveals the "essential uniqueness" of each individual, and prevents his submergence into the corporate life.

Froebel recognized the dual function of purposeful education when he wrote:

The purpose of teaching and instruction is to bring ever more *out* of man rather than to put more and more *into* him; for that which can get *into* man we already know and possess as the property of mankind, and every one, simply because he is a human being, will unfold and develop it out of himself in accordance with the laws of mankind. On the other hand, what yet is to come *out* of mankind, what human nature is yet to develop, that we do not yet know, that is not yet the property of mankind; and, still, human nature, like the spirit of God, is ever unfolding its inner essence.²⁰

²⁰ *Education of Man*, p. 279.

Humanization of the child as a factor in the humanization of mankind cannot take place without increasing recognition of man's dependence upon the past with its achievements, which gives validity to faith; without the realization of a present replete with opportunities for loving service; without the allurements of a future that is radiant with hope.

Such are the ideas and ideals of the third, and latest, conception of the kindergarten program. Those who are working consciously under its guidance believe it to be in accord with the best that modern philosophy and psychology have to offer to the teacher. They also believe that it is in accord with the principles of the Froebelian philosophy.

Such, then, are the three conceptions of the kindergarten program. They cannot be considered as isolated entities, but, rather, as factors in one movement that makes for the establishment of the kindergarten as a universally necessary department of purposeful education. No one claims to fully understand the meaning or significance of childhood; and when, in the progress of evolution, we pass to a higher conception of the program, led by clearer insights into the nature and needs of the child, and by deeper philosophic and psychological insights, we may still follow Froebel, since to be truly Froebelian is to follow the spirit of his life-work, rather than the letter of his imperfect system.

VI

THE HISTORY OF KINDERGARTEN INFLUENCE IN ELEMENTARY EDUCATION

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THE KINDERGARTEN'S CONTRIBUTION TO EDUCATION—IN GENERAL

The kindergarten has been one of the vital influences in American education. Its influence has been exerted along many different lines and upon many different groups of people. It forms a happy memory in the lives of the three million or more children who have participated in its procedure since the first kindergarten was opened in America. It has interpreted life from a higher standpoint to the twenty-five thousand or more young women who have taken courses in kindergarten training. It has aided the thousands of mothers who have made a study of its principles in meeting the daily problems of the home. It has enabled the Sunday-school teachers of the land to organize the religious instruction of little children upon a more fundamental basis. It has given teachers of every grade a new insight into the educational process, and has taught them to direct the development of their pupils with more wisdom than before. That the attitude of the world toward childhood has been revolutionized during the present generation; that motherhood has taken on a new and higher significance; and that primary education has been transformed in recent years largely as a result of kindergarten influence are facts so thoroughly recognized as to need but a passing mention. In enriching the lives of the children who have participated in kindergarten procedure, in interpreting the significance of motherhood anew to the women of the land, and in setting a new and different standard for the teacher, the kindergarten has rendered an invaluable service. As the value of its influence is recognized, the extension of the kindergarten has become one of the features of educational progress.

WHAT THE KINDERGARTEN HAS DONE FOR THE PRIMARY SCHOOL

Great as the value of the kindergarten may be to the children who participate in its exercises, its greatest service to education can not be rendered by the mere addition of kindergartens to the graded school system. If the principles upon which kindergarten practice is based are valid, they must be valid not alone for the stage of development which the kindergarten covers, but also for the other stages as well. The powers awakened during the kindergarten years need progressive and continuous exercise to reach the development of which they are capable, and unless the work that follows is based upon the same general principles the development is arrested. The fruit of the kindergarten tree needs a longer time to ripen than that afforded by the kindergarten years alone. The transformation that the work of the primary grades has undergone in recent years bears testimony to the recognition of these facts. The progress of the kindergarten movement is measured in part by the increasing number of kindergartens. It is measured no less by the increasing application of its principles to grade work. The multiplication of kindergartens is relatively a simple matter. The reorganization of the elementary school has been a task of far greater complexity. The kindergarten embodied a new ideal of education; it implied a different attitude toward childhood; it utilized for the child's development means other than the traditional ones; it employed different methods of procedure. The application of kindergarten principles to primary-school practice meant nothing less therefore than the reorganization of the school—the reconstruction of its ideals, the enrichment of its curriculum, the adoption of new and different methods. Since the kindergarten embodied the principles of the new educational philosophy, it alone would in great measure have effected the transformation of the school. But at the time when its influence began to be felt other forces were at work in American life—forces which created other movements destined to play a part in the transformation of American education. These movements differed in origin, aim, and scope, but all reinforced the influence exerted by the kindergarten and hastened the transformation which it would have effected. The modern primary school is the complex product of these many influences.

OTHER MOVEMENTS THAT HAVE REINFORCED THE KINDERGARTEN

While the present procedure of the primary schools bears the stamp of the kindergarten too unmistakably to leave one in doubt as to the source from which the transforming influence has come, other influences have played their part and have left their impress. Of this the art and manual-training movement, which next to the kindergarten has been the strongest influence in the transformation of the school, is an illustration. The child-study movement and the Herbartian movement of a later date are other examples of movements that have influenced the aims and methods of elementary education and left their mark upon school work. Any discussion of kindergarten influence that does not recognize these other movements and their reciprocal influence upon the kindergarten and upon each other must therefore be inadequate. To comprehend the primary school of the present it is necessary to glance briefly at its past, and at the movements that have played a part in its transformation.

THE PRIMARY SCHOOL WHEN THE KINDERGARTEN CAME

The primary school, as that term is now understood, has been in existence but little more than forty years. The system of grading that created it did not come into general use until after the Civil War. The traditional curriculum of the "Three R's" with which it began was gradually modified by the addition of new subjects, and as early as the seventies it showed signs of progress. Object-lessons had become general as a result of Pestalozzian influence, emanating from the Oswego Normal School. In 1870 drawing had been introduced into the schools of Boston. This was the indirect result of the London and Paris Expositions in 1851 and 1867, which had shown the value of art instruction as an educational factor. Although these additions had been made in the more progressive communities, formal instruction was the rule and the repression of childish activity the established form of procedure. The word method of teaching reading had, it is true, supplanted the time-honored drill in the ABC's, but with few exceptions the methods of instruction had not yet been touched by the new spirit. The musical instruction for which such books as Loomis' *First Steps* furnished the basis was formal in the extreme and the rote song

was unrecognized. The instruction in drawing was based upon geometrical principles, and had no foundation in children's native interests. Form study did not become the basis for art instruction until 1880 and not until much later did color work become a recognized feature. The free expression of the children's ideas by means of clay-modeling, paper-cutting, or painting was unknown in school work. The need of physical activity in the form of play and games, and the value of contact with nature, were also unrecognized. The teachers having the least training and experience were placed in charge of the youngest children and paid the lowest salaries. Such was the primary school in the early seventies, when the kindergarten came.

DIFFERENT INFLUENCES THAT HAVE MODIFIED ELEMENTARY EDUCATION

As has been stated, the changes that have taken place in elementary education during the past thirty or more years have been the result of many different influences. These influences may be grouped into two periods; the first beginning at about the time of the Philadelphia Exposition and continuing until about the time of the Exposition at Chicago; and the second beginning with that event and continuing until the present time. The movements exerting the greatest influence during the first of these periods were the kindergarten movement, the art and manual-training movement, and the nature-study movement. These movements continued their influence during the second period, but they were reinforced by the new psychology, child-study, and Herbartianism. The Philadelphia Exposition was a great stimulus to art education, and in a lesser degree to the kindergarten also. "Throughout all the long hundred years in which they had been building a nation, Americans had shown themselves children of utility, not of beauty," says Woodrow Wilson. "Everything they used showed only the plain unstudied lines of practical serviceability. The things to be seen at Philadelphia, gathered from all the world, awakened them to a new sense of form and beauty. Men knew afterwards that that had been the dawn of an artistic renaissance in America, which was to put her architects and artists alongside the modern masters of beauty and redeem the life of her people from its ugly severity." As a result, "an immediate wave of art enthusiasm spread over the country,"

and art instruction became a part of the school curriculum in every progressive community. The kindergarten movement also felt the stimulus of the exposition. In 1870 there were but ten kindergartens in the United States. In 1880 the number had increased to four hundred. In spite of the fact that, with the exception of those in St. Louis, these kindergartens were all private or charitable, they exerted an influence upon the school system of many a city, even upon those that did not adopt them as a part of the public school system later.

The nature-study movement had a different origin. The introduction of science into the colleges and universities had shown the necessity for cultivating the children's powers of observation during the early years; hence courses in nature study for the grades were advocated and attempted. The new interest in literature called also for the beginning of literary instruction in the elementary school, and hence the story began to receive recognition as an educational instrument. The influences that combined to reconstruct elementary education thus came from three different sources: from the industrial world, which demanded art instruction as a preparation for industrial life; from the colleges, which insisted that the proper intellectual habits should be formed and formed early; and from the educational reformers, who proclaimed the doctrines of Pestalozzi and Froebel as a means of awakening the people to a realization of education as something more than instruction in the traditional school arts.

THE DECADE OF TRANSITION—1880-1890

Since it took time for the new influences to make themselves felt, the breaking-up of the old régime did not become general until the decade between 1880 and 1890. That decade may therefore be called the decade of experiment and transition. To the uninitiated it was a decade of confusion. The addition of new subjects meant either the displacing of established ones or the overcrowding of the program—at least a disturbing of the established order. The new subjects called also for the use of new and unfamiliar methods—another element of uncertainty. Since teachers and even superintendents did not always understand the purposes of the new subjects, their relation to the traditional ones, and the methods to be used in presenting them, it is not strange that the results should

have been unsatisfactory many times, and that discontent should have been rife, both in the teaching ranks and in the community. In course of time an adjustment to the new conditions was effected. The ideals that called for new subjects and new methods were more clearly apprehended, and a new unity was worked out, both in curriculum and methods. The curriculum of the present has an organic unity of its own, based upon the experiences, the activities, and the interests of children in the different stages of development, but the school in which such a curriculum obtains is separated from the school of the eighties by an immeasurable distance. The progress made since that time is due to the kindergarten and to the movements that characterized the decade between 1890 and 1900—the new psychology, child-study, and Herbartianism. The effect of these will be touched upon later. There have been three stages, therefore, in the evolution of the modern primary school; the first, in which the old ideals prevailed; the second, in which a transition from the old ideals and methods to the new was in progress; and the third, in which the new determine both curriculum and method. But since progress has not been equally uniform in all sections of the country, schools may be found representing each of these stages. Some still embody the old ideals and have not, therefore, progressed beyond the first stage; others, the great majority in fact, have accepted the new ideals in theory, but are still struggling with the problems of their application; still others relatively few in number but constantly increasing, have satisfactorily worked out the new ideals in practice.

Toward the end of the decade between 1880 and 1890 certain positive results had been realized from kindergarten influence. The spirit and manner of the kindergartner had become the accepted standard for the primary teacher because the attitude toward childhood for which the kindergarten stands had been accepted as the true attitude. The fundamental principle of the kindergarten—education through activity had been recognized as the principle upon which primary teaching should be based, since an acquaintance with the kindergarten had shown its validity. The external features of the kindergarten—its songs and games—had been adopted in many schools. The methods of art education had been radically reconstructed as a result of its influence, and the reconstruction of the

methods in teaching music, nature-study, and physical training was well under way.

CHARACTERISTIC ASPECTS OF KINDERGARTEN INFLUENCE ON PRIMARY EDUCATION

The knowledge of educational conditions thus outlined is necessary as a background for the study of the kindergarten influence and progress. It is not difficult to see how the drawing and manual-training, or other movements have influenced the character and methods of the school. When the adoption of a new subject was decided upon, its adaptation to the several grades was carefully considered, the teachers were given instruction in the methods to be employed, and adequate supervision was provided to meet the problems of administration. In the case of the kindergarten it was very different. When kindergartens were added to the school system, a supervisor was engaged in the larger cities, it is true, but her duties seldom included instruction to the grade teachers in the methods of applying kindergarten principles to their particular work. In fact, so little direct effort was made to bring kindergarten influence to bear upon school work that one may well ask: What means did the kindergarten adopt to affect school procedure so vitally? The introduction of drawing, music, manual training, and physical exercises into the school curriculum lessened the apparent difference between the kindergarten and the school, but did not necessarily carry with it the spirit and method of the kindergarten, nor did it insure the attitude towards childhood for which the kindergarten stands. The primary teacher of the present has absorbed the spirit of the kindergarten by observation and training, though she may be unconscious of that fact. The approval which the kindergarten received compelled the teacher of the early day, steeped in the formalism that characterized the school work of that time, to acquaint herself with kindergarten procedure, and as far as possible to adopt its spirit and method. This was no easy task. Where kindergartens existed, teachers diligently visited them; where they did not exist, the teachers' only resource was the available literature of the subject or attendance at some of the summer schools, such as those conducted by Colonel Parker at the Cook County Normal School, or W. N. Hailmann, at La Porte, Indiana, that made a speciality of the kindergarten and its principles. While

the study of kindergarten theory did much to produce the change in attitude, the main source of inspiration was the kindergarten itself. The primary teacher who visited a kindergarten could not fail to be impressed by the kindergartner's attitude toward her children—by her co-operation with them in the spirit of comradeship, and by her sympathetic insight into their interests and needs. She was impressed no less by the children's attitude toward their work, by the spontaneity of their interest, and by their delight in the use of the bright-colored material. The games were a revelation to her, since they showed that there could be freedom without disorder; the interest which the children took in the kindergarten songs made her own drill on scales and intervals seem little better than drudgery; and the attractiveness of the kindergarten room gave her helpful suggestions concerning the value of beauty as a factor in education. In short, recognizing that there was possible an order of things very different from that to which she was accustomed, she determined to profit by the lesson. If kindergarten procedure could be made so interesting, why not school procedure as well? Why, she asked, should there not be pictures upon the walls and plants in the windows in the primary room as well as in the kindergarten? Why should the kindergarten children have bright-colored material and the primary children none? Why could not the songs and many of the games used in the kindergarten be used also in the primary department? The educational leaders were beginning to ask the same questions, and to urge the utilization of childish activity in the primary grades, but no arguments were half so convincing as the example of the kindergarten itself. As a result the characteristic features of the kindergarten were to a greater or less degree adopted by the school. Exercises with kindergarten material became common, and kindergarten songs and games were incorporated into the procedure of the primary school. Since the work in drawing was not based upon form-study until 1880, and color exercises formed no part of that work until many years after, the kindergarten material was a revelation to the teachers, and the gift and occupation exercises gave to many the first suggestions concerning instruction in form and color. The success of the constructive exercises carried on in the kindergarten converted many to the value and feasibility of manual training also. The expense involved in the introduction of drawing and manual training as

such had delayed that introduction in many instances; but the success of the exercises of a kindergarten character, which involved but little expense, not only familiarized the teachers with the purposes and methods of these subjects, but also prepared the public for their acceptance. Where drawing and manual training had been introduced, the efforts toward the adoption of kindergarten principles strengthened the work already undertaken. Where they had not, the attempts along kindergarten lines hastened such introduction. The children's interest in *doing* was in such marked contrast with their interest in mere learning—by the customary methods at least—that teachers and school boards could not fail to see that a new educational force had been discovered and a new vein of child-interest struck.

THE PRANG SYSTEM OF ART EDUCATION

It was along such practical lines as these that the influence of the kindergarten upon the primary school was first felt. It is a question whether the so-called application of kindergarten principles to the work of the grades meant much more to the average teacher during the decade between 1880 and 1890 than the adoption by the school of the external features of kindergarten procedure. But the mere adoption of these features led to a deeper study of Froebelian doctrines, and this in turn to an insight that resulted in better things. The fact that the kindergarten could obtain results in the line of art expression that could not be obtained by any other method had led the advocates of art instruction as early as 1880 to reconstruct the system of art education on a basis Froebelian to the core. The result was the Prang System of Art Education. The Prang System has been one of the great agencies of educational reform, and the most effective ally of the kindergarten in placing the work of the school upon an active instead of a receptive basis. Wherever the Prang system is used the principles of Froebel are disseminated. The success of the system is due in no small degree to its espousal of kindergarten principles. It has become one of the great agencies for the spread of the kindergarten gospel.

THE KINDERGARTEN SONGBOOK

But the art instruction was not the only line of work that was reorganized in whole or in part as a result of a growing insight

into kindergarten principles. The kindergarten songbook rendered an important service in carrying kindergarten influence into the school, as has been stated. Since it was the agency by means of which kindergarten games found their way into the primary school-room, the songbook did as much as the kindergarten material to introduce the principle of activity into primary education. But acquainting primary teachers with kindergarten games was but a part of the service the songbook rendered. It showed a new conception of the function of music in a child's development, and of the methods by which that development should be secured. The kindergartner maintained that this development depended upon the cultivation of musical feeling, and that this made the hearing of good music adapted to the child's comprehension, indispensable. This practically created the child's song and brought the rote song into use as an educational instrument. She maintained further that the appreciation of rhythmic exercises and participation in them is essential, and that such exercises should therefore have a place in the kindergarten program. She further insisted that opportunity for the interpretation of music should also be given, and that there should eventually be creative expression in music, as there is such expression in other lines. But if these ideas were to obtain in the music-teaching of the grades, a new system of ideals and methods was needed. The principles in question were gradually recognized, and a reorganization of the music-teaching in the grades was undertaken. Such a reconstruction was hardly more than conceived of, however, during the decade in question; in fact, it has been but partially effected, even yet. Because the kindergarten songbook suggested such a reconstruction, and introduced games and dramatizations into the grades, it has been one of the main agencies for the spread of kindergarten influence. Wherever it has gone it has carried the kindergarten spirit—the sympathetic interpretation of childhood, the love of nature, and respect for human activity, whatever its form.

THE KINDERGARTEN GAMES IN THE PRIMARY SCHOOL

The use of the kindergarten game in the primary school led to the reorganization of another line of work also. The physical needs of school children have received but scant consideration at the hands of school authorities, but about the middle of the decade

under consideration gymnastic exercises were introduced into the schools of all the larger cities. But the spirit with which the children entered into the games, in marked contrast with the spirit manifested in the formal exercises, showed plainly that this branch of school work had not yet been placed upon a proper foundation. That there was needed a course of physical training in which games appropriate to the different grades should have a place was readily seen. Such a course was not worked out during the decade in question. Like the needed reorganization in musical lines, it is hardly worked out even yet, but much thought has been given to it in recent years.

THE KINDERGARTEN AND NATURE-STUDY

In the line of nature-study, too, the kindergarten suggested new ideals and methods. That such study was successful when the emphasis was placed where the kindergartner placed it—upon the care and observation of living plants and animals, upon gardening, and excursions to see Nature at work in her own time and way—all this the kindergarten had abundantly demonstrated. In consequence the organization of nature-study courses for the grades along the above mentioned lines was undertaken. Little was accomplished until after the decade under consideration had passed, but the new insight gained was not lost.

SIGNIFICANCE OF THE DECADE, 1890-1900

As has been stated, the decade between 1880 and 1890 was a significant one in the history of elementary education, because it saw the inauguration of many new features in school work. The decade between 1890 and 1900 was even more significant, since it saw the rise of other movements destined to give a more fundamental insight into the ends and means of education, those of the kindergarten included. The literature of the kindergarten had familiarized the public with the conception of education as a process of continuous development—a process in which the child's creative activity must play an important part. This doctrine had been impressed upon the teachers of the country with rare force by Colonel Francis W. Parker, who embodied in himself the attitude toward childhood which the new education represents, and who probably did more than any other single individual in the United

States to bring about the acceptance of the new educational doctrines in their application to the grades. At the beginning of the decade in question the doctrine of education as a process of continuous development received a signal reinforcement from the teaching of the new psychology that was beginning to make itself felt—the psychology of Dewey, James, Hall, and others. This was the product of the new spirit in the colleges, the spirit of the inductive sciences. The biological sciences had laid the foundation for the knowledge the new psychology proclaimed namely, that the development of the child falls into well-marked stages, and that education to be valid must be based upon the interests and activities of these different stages. This was what the exponents of the kindergarten had been proclaiming, to be sure, but many who had been unwilling to accept the Froebelian doctrine, based upon insight rather than upon scientific method, accepted these same doctrines without question when their correctness was thus established. The Froebelian principle of creative activity also received a confirmation no less marked. A fuller knowledge of the nervous system gave a new insight into the mental processes, and had therefore thrown added light upon the nature of true educational procedure. The recognition of the part that the motor activities play in development gave a new significance to physical exercise, to games and plays, to manual training and art work, and to nature-study in the form of gardening and excursions. The child's mental image became a recognized means of education, and the free expression of his images a necessary part of the educational process, not alone in art work but also in music, language, and other forms of school effort.

GENETIC PSYCHOLOGY AND THE CHILD-STUDY MOVEMENT

The child-study movement, which was the natural outgrowth of the new psychology, attempted a task which would have been of inestimable value had it been satisfactorily completed—the gathering of a body of facts concerning the nature and growth of children at different stages upon which a true science of education might ultimately be built. Much of value was accomplished, although the most important part of the work—the sifting and organizing of the collected data—has never been satisfactorily completed. The movement gave an added stimulus to the study of psychology as a basis for education, however, aided in the reor-

ganization of many phases of educational procedure, destroyed the tendency toward the blind acceptance of educational doctrines whatever their source, and led to an appreciation of the new educational movements that would have been impossible before. To many it gave their first insight into the nature and purpose of the kindergarten; to others it reinterpreted the Froebelian doctrines and gave them a broader significance.

The psychological movement, of which the child-study movement was a part, had a most important bearing upon the progress of the kindergarten as such and upon the application of its principles to grade work. But before this can be discussed another movement that had an important bearing upon American education must be considered. This is the Herbartian movement. The new psychology, child-study, and Herbartianism were the three influences that shaped the educational thought of the decade. The general character of that thought has determined in a large measure the form that kindergarten procedure as such has taken, as well as the form that the application of kindergarten principles to grade work has assumed.

THE HERBARTIAN PEDAGOGY

The character of German pedagogy during recent years has been determined largely by the influence of Herbart, and in view of Germany's leadership in education it is not strange that her pedagogy should have influenced education in the United States. The psychology of Herbart has found little or no acceptance among American educators, but the practical value of certain phases of Herbartian doctrines aroused considerable interest. For a number of years there was hardly an educational meeting of importance in which a discussion of those doctrines was not given an important place. In the thorough weighing which Herbartian doctrines have thus received, many have been found wanting in value for American education, but some have been given deserved recognition. Herbart's psychology has not stood the test of modern thought, but his doctrine of apperception is conceded to be one of the most important contributions to recent pedagogical science. The Culture Epoch Theory associated with his name has been rejected as the foundation for the American school curriculum, but the thought that the curriculum of the elementary school should have a character-building content has given history, literature, and nature-study a permanent

place in grade work and made a return to the curriculum of the "three R's" forever impossible. A school program based upon the Herbartian principle of correlation may have been found impracticable, but the attempts in that direction did much to make the curriculum an organic whole instead of a mere collection of unrelated subjects. The doctrine of interest may have needed the modification it received at the hands of American psychologists, but it has done much to give a more fundamental character to education. The movement in general reinforced the theory of stages in a child's development, but it considered them from another point of view—that of subject-matter appropriate to each. The doctrine of creative self-activity this movement did not recognize, and in this respect it was out of harmony with the educational theory in process of formation as a result of other tendencies. By its discussion of the essential steps in the teaching process Herbartianism rendered a most valuable service to pedagogical science and placed classroom instruction upon a new and higher level. Altogether the Herbartian movement must be considered one of the most stimulating influences in American education.

GROWTH AND DIVISION: TWO SCHOOLS OF KINDERGARTNERS

The kindergarten, which was becoming a part of the school system while these movements were in progress, could not fail to be influenced by them, both directly and indirectly. Although the attention paid to the newer movements seemed to relegate interest in the kindergarten to the background, in reality it was making most remarkable progress. In 1890 it had secured a legal foothold in less than half a dozen states; at present, kindergartens can be established at public expense in half the states of the Union. In 1890 five or six of the larger cities and twenty-five or thirty of the smaller ones had adopted the kindergarten into the school system; in 1902 public-school kindergartens were reported in four hundred and forty. In 1890 not more than six of the state normal schools of the country had established kindergarten training departments; at present such departments have been organized in more than fifty. This growing incorporation of the kindergarten into the school system had consequences that were far reaching. Had it remained outside of the school system, it might have remained uninfluenced by the movements that were shaping general educa-

tion; its introduction into the school system made its modification inevitable. Before the advent of the new psychology kindergarten procedure had been considered the ideal which school practice should emulate. But while the psychologist had pronounced favorably upon the kindergarten as a whole, and thus established it more firmly than ever in the confidence of the people, he by no means approved of the kindergarten doctrine in its entirety, nor of all the phases of kindergarten practice. Since he recognized no authority except that furnished by his own or kindred sciences, he assumed an attitude more or less critical, considered that much of the work with the gifts and occupations required an exactness detrimental to young children, and declared a reconstruction of its theory and practice necessary. When the kindergarten became a part of the public-school system, these criticisms were brought to bear upon its practice as they would not have been had it remained a separate institution. The school superintendents of the country, versed in psychology and educational theory in general, acquainted the kindergartners with the newer views and frequently insisted upon such a modification of established procedure as the newer views demanded. When such modifications first began to appear, the kindergartners who had not themselves felt the pulse of the general educational movements considered such deviations from established procedure as nothing more than a "failure to understand Froebel." When the modifications became more general, those advocating them were regarded as misguided individuals who had forsaken the true gods and affected an unholy alliance with the worshipers at other shrines. But as the differences became more apparent the kindergartners of the country began to ally themselves either with those who approved the changes in progress on the one hand, or with those who were opposed to them on the other. The ultimate result was the division of the kindergartners of the country into conservatives and liberals, the former clinging to the established interpretation of Froebelian doctrine and the mode of kindergarten procedure that Froebel is supposed to have followed, and the latter accepting the new interpretation and modifying the procedure on the basis of the criticisms made. Fearing that the lack of agreement in the kindergarten ranks might work injury to the kindergarten cause as a whole, the International Kindergarten Union in 1903 appointed a committee, known as the Committee of Nineteen,

to inquire into, and if possible reconcile, the differences that had grown up. The committee was composed of leading representatives of both the conservatives and liberals, as well as of those known to occupy middle ground. Several most profitable meetings have been held, but the work for which the committee was organized has not yet been completed. Those who hoped for a reconciliation of the opposing schools of kindergarten interpretation as a result of the committee's deliberations, however, will doubtless be disappointed, since the conservatives have been unwilling thus far to accept the conclusions of modern psychology upon which the liberal views are based, and the liberals are equally unwilling to return to views which they feel that they have outgrown. The report of the committee's work cannot fail to be a most valuable contribution to kindergarten literature.

Although many kindergartners have not yet accepted the views for which the liberal kindergartners stand, the logic of events points to their ultimate acceptance if the kindergarten is to become an organic part of the American school system. The progressive kindergartner considers that psychology and child-study are but elaborating the principles which Froebel himself recognized as clearly as the knowledge of his time would permit, and that the added insight of the present but furnishes the means of perfecting the institution which he did not live to complete. She therefore welcomes the light which modern science has thrown upon the development of the child's body, even though it necessitates the reorganization of the games which Froebel considered adequate for its development. She recognizes the value of the idea upon which the system of gifts and occupations is based—that of carefully organized impressions to be followed by adequate expression; but psychology has taught her that much of the customary work with both gifts and occupations requires an exactness injurious to undeveloped nerves and muscles. Her faith in creative activity as the fundamental article in the kindergarten creed has not been shaken, but she considers work creative only when it is the expression of the child's own image. She accepts the Froebelian doctrine of the value of beauty in awakening the child's higher nature, but her study of art has shown her that the customary work with the gifts and occupations would not lead him to a recognition of true beauty. She yields to no one in her belief that children may be prepared

for the appreciation of spiritual truths early, but she can accept the kindergarten doctrine of the symbol as a means of doing so in its modern interpretation only. In these and other respects the liberal, or progressive, kindergartner considers that there is opportunity for great improvement, both in the theory of the kindergarten and in its practice. In general she is willing to submit both to the test of modern educational insight knowing that what is of true value will not be overthrown.

INFLUENCE AND PLACE OF THE MODIFIED KINDERGARTEN

But what effect has the modification of kindergarten thought and practice had upon the progress of the kindergarten as such, and upon the application of its principles to grade work? A most gratifying one in every way. The kindergarten had been accepted by the American people before it received the sanction and the criticism of the psychologists, but it was a thing apart from the school, in aim, material, and method. Psychology rediscovered the principles upon which kindergarten procedure is based and gave them a universal significance. It therefore broke down the wall of separation between the kindergarten and the school, and laid the foundation for their ultimate unification. So thoroughly are the principles of psychology in accord with the fundamental principles of the kindergarten that, had there been no kindergarten to begin the transformation of the school before the advent of the new psychology, a transformation akin to that which was in progress would have been effected sooner or later by that movement alone; and had Froebel failed to devise the kindergarten as the first stage in a system of educational procedure, his American successors—the exponents of the new psychology—would have been obliged to do so. It is not strange therefore that the kindergarten itself should have made more rapid progress during the past few years than ever before and that its principles should receive increasing recognition. The battle for its existence in American education was fought and won at an earlier stage; the greater battle for the application of its principles to general educational procedure was won with the new interpretation of its doctrines, and the inauguration of the new modes of procedure. Dr. Richard G. Boone says: "Should the kindergarten be everywhere abandoned as a part of the school machinery, it would still remain in spirit as a determining factor in every other

part of the system, and in no less than a decade the kindergarten itself would have reclaimed its recognition and place—so vital is it in current educational thought."

PRESENT PROBLEMS AND PRESENT STATUS

The acceptance of an educational theory is an easy matter. The application of that theory to existing conditions is a more difficult one. The adoption of the kindergarten as a part of the American school system has given rise to many problems that have not yet been satisfactorily solved. The mere adjustment of the kindergarten as such to the school as such has raised many difficulties in administrative work, but these need not be discussed here. The reorganization of practice in the kindergarten itself presents other problems, those which the superintendent and the kindergartners must work out together. The application of kindergarten principles to primary-school practice presents still other and greater difficulties. It calls for the co-operation of all the educational forces, and success can be hoped for only when superintendent, kindergartners, primary teachers, and teachers of special subjects work with intelligent insight toward a common end. But what are the fundamental principles whose application is to be effected? These have been differently stated; H. Courthope Bowen considers "that the doctrine of creativeness—the practical application of the principle of self activity—together with the doctrine of continuity and connectedness, forms the true heart of Froebel's system." It is the doctrines of continuity and connectedness combined which have reconstructed the primary curriculum during recent years, on the basis of the child's fundamental interests and activities at successive stages, and the doctrine of creative self-expression that has reorganized existing methods in art, music, manual training, language-teaching, and kindred forms of school work. The result is the primary school of the present, the school in which, according to Dr. Monroe, "the emphasis is placed upon the activities of the child rather than upon the technique of the process of instruction, and where development of character and personality is sought rather than the mere impartation of information and the training of intellectual ability." In such a school, "the materials of instruction, if they are really and vitally to produce the development of the child's mind and nature, must be selected from life as it now is, and as it

affects the child and comes within his comprehension," says Dr. Monroe further. And if the school in question be thoroughly Froebelian, the method as well as the material of instruction must be the result of the child's thought and experience, it must be the method of creative self-expression. There is many a primary school today in which these principles are intelligently applied, and which is therefore as truly Froebelian as the best kindergarten. There is many a primary teacher, too, who is as genuinely a child-gardener as the kindergartner herself, and who is doing as much as the kindergartner to further the cause of kindergarten progress.

CONCLUSION

The kindergarten has thus exerted a most vital influence upon American education; but the transformation of the school that it is capable of effecting has hardly more than begun. The list of cities in which the kindergarten has been adopted is a creditable one, but it is small compared with the list of those in which such adoption has not yet been effected. The schools in which the doctrines of Froebel are applied are doubtless increasing, but those that give no evidence of having been influenced by those doctrines are still too numerous. The educational movements of the present are all in accord with, or the result of Froebelian doctrines. As the new movements are more fully comprehended, the logic of events points to a great extension of kindergarten influence in the near future. The furthering of that influence should be the aim of all who have the highest interests of American education at heart.

MINUTES OF THE MEETINGS HELD IN CHICAGO,
FEBRUARY 25 AND 27, 1907

Monday evening, February 25.—"The Certification of Teachers" was the topic for discussion. Dr. Cubberley's carefully prepared monograph on this subject had been studied by many of the members present. This was particularly true of those who had indicated in advance their intention to discuss some phase of the subject. The discussions were therefore valuable. The following members took leading parts in the discussion:

Dr. Reuben Post Halleck made a short introductory talk, in which he called attention to the important work the National Society is doing, and to the importance and timeliness of the topic under discussion. He emphatically announced himself as opposed to any educational policy that discourages or denies "free trade in brains," as does the prevailing system of certification of teachers.

Dr. Henry Suzzallo opened the discussion of the *Yearbook* in place of Professor Cubberley, who was detained because of sickness. He set forth in a direct and clear way the main points in the *Yearbook*, thus opening the subject in an excellent way for further discussion.

The discussion that followed Dr. Suzzallo's introduction dealt with various prominent phases of the subject. Some parts of it would be valuable matter for the *Yearbook*, and hereafter an attempt will be made to have stenographic reports, or to have the speakers write out their discussions soon after the meetings. The following members took prominent parts: Dr. Charles DeGarmo, Cornell University; Superintendent J. M. H. Frederick, Lakewood, Ohio; Professor John F. Brown, University of Wyoming; Professor Edwin G. Dexter, University of Illinois; Professor G. W. A. Luckey, University of Nebraska; Professor Edward F. Buchner, University of Alabama; Superintendent J. Stanley Brown, Township High School, Joliet, Ill.; Superintendent C. P. Cary, of Wisconsin (Mr. Cary was the only speaker that took definite issue with the idea of state centralization as the best means of improving the prevailing system of certificating teachers); H. A. Hollister, University of Illinois; Charles H. Keyes, Hartford, Conn.; Super-

intendent H. M. Slauson, Ann Arbor, Mich.; and B. C. Moore, superintendent of McLain County, Ill.

Motion was made to adopt a recommendation of the Executive Committee that a committee of three be appointed to promote more effective legislation and administration of certification and professional improvement of teachers in the several states. Amendment to make the number on the committee four was carried, and the motion passed unanimously.

Professor Dexter moved that a committee of one be appointed to report an appropriate expression of the National Society in remembrance of the late Dr. Wilbur S. Jackman. Carried. Dr. C. A. McMurry was later appointed as this committee, to report at the Wednesday evening meeting.

Wednesday afternoon, 4:30 o'clock.—This was the annual business meeting, and no attempt was made to take up the discussion of "The Vocational Studies for College Entrance," which was the topic announced for this meeting. Postponement of this discussion was necessary because of the inability of many members who were interested to attend. Before adjourning there was some continued discussion of the certification of teachers.

The Committee on Nominations reported as follows:

For President—Stratton D. Brooks.

For Secretary-Treasurer—Manfred J. Holmes.

For place made vacant on Executive Committee by making Superintendent Brooks President—Reuben Post Halleck (one year).

For the two new members of Executive Committee—J. Stanley Brown and Henry Suzzallo.

The following recommendation of the Executive Committee was adopted; namely, that, in addition to necessary expenses, the Secretary of the Society be allowed the sum of \$100, to be paid out of such funds as shall remain in the treasury after all other regular expenses are met.

The following persons were elected to active membership at the Chicago meetings:

George A. Axline, president State Normal School, Albion, Idaho.

Professor Frederick G. Bonser, State Normal School, Macomb.

Mrs. Mary D. Bradford, Stout Training Schools, Menomonie, Wis.

George A. Brown, editor *School and Home Education*, Bloomington, Ill.

Superintendent Arthur D. Call, Hartford, Conn.

Professor Edward C. Elliott, University of Wisconsin, Madison, Wis.

Superintendent L. D. Harvey, The Stout Training Schools, Menomonie, Wis.

Superintendent Warren E. Hicks, Cleveland, Ohio.

Superintendent James F. Keating, Pueblo, Colo.

Superintendent Charles H. Keyes, 82 Wethersfield Ave., Hartford, Conn.

Miss Anna E. Logan, Principal Ohio State Normal, Oxford, Ohio.

George H. Martin, Secretary Massachusetts Board of Education, Boston, Mass.

Superintendent J. V. McMillan, Marietta, Ohio.

Professor A. S. Olin, University of Kansas, Lawrence, Kan.

Frank H. Palmer, editor *Education*, 50 Broomfield St., Boston, Mass.

Professor Walter D. Scott, Northwestern University, Evanston, Ill.

Professor George D. Strayer, Teachers College, New York, N. Y.

Professor Harry K. Wolfe, University of Nebraska, Lincoln, Neb.

Wednesday evening, 8:00 o'clock.—The Wednesday evening session proved an excellent one. "Vocational Studies for College Entrance" was the topic for discussion. Here again some of the contributions to the discussion would be valuable material for the *Yearbook*. Theodore de Laguna, George D. Strayer, W. S. Sutton, Dean James E. Russell, David S. Snedden, M. V. O'Shea, Jesse D. Burks, E. L. Thorndike, Charles McKenny, and others took leading parts.

It was proposed at this meeting that the committee to conduct this study of the vocational studies for college entrance be continued and enlarged; and that a working basis be established for recognition of vocational studies for entrance credit. The Executive Committee took this under advisement.

An appropriate expression of appreciation of the work and life of Dr. Wilbur S. Jackman, and sorrow for his untimely death, was adopted.

MANFRED J. HOLMES, *Secretary*

DISCUSSION—MAKING ROOM FOR VOCATIONAL STUDIES

THEODORE DE LAGUNA
University of Michigan

Certain comments which Mr. Herrick makes upon my paper on "Vocational Studies" in the *Sixth Yearbook* of this society show that I did not succeed in making my position sufficiently clear; and I take this opportunity of adding the apparently necessary explanation.

I. In the first place, it is not to be understood that the entrance requirements of the University of Michigan are less in amount than is usual among the better colleges of the country. Had that been the case, I should not have taken them as an example. The fifteen units which are required are based upon the usual estimate of four *or* five recitation periods per week for a school year, for each unit. If five periods per week are given to every study throughout the school course, it is obvious that, with four recitations daily, sixteen units can be completed in the four years—one more than is required. If, on the other hand, the lesser allowance of four periods per week for each study is made, twenty units can be completed in the same period—five more than is required. That is to say, five studies, to each of which is allotted four recitations per week, can be carried on with four recitations daily, if each study is omitted on a different day of the week. Furthermore, if, as seems more reasonable, half the units were put upon the five-hour basis, and half upon the four-hour basis, eighteen units can be completed in the four years—three more than is required.

II. It was with these facts in mind that I wrote: "The well-organized high school can easily, if its administrators so desire, devote four or five periods a week to such [vocational] subjects throughout the entire course, and still *contrive to meet* the college entrance requirements." The words which I now italicize were evidently overlooked, and the statement was taken to be a general recommendation. I did not so intend it. It was meant to indicate the *practical maximum within which a wise middle course might be found*; for I take it for granted that not more than four recitations a day (or their equivalent) should be required of any high-school student. Now, just how much in the way of vocational study can be thus inserted without overcrowding the curriculum would, I suppose, depend upon the particular subjects in question. In the case of various branches of manual training, and especially in the case of agriculture and the allied pursuits, I should unhesi-

tatingly recommend the maximum. The commercial studies, however, being sedentary in character, could not easily be given so large a place. I dare say that not more than two or three units of such work could be thus provided for without serious danger.

If, then, a greater amount of commercial work is desirable in the case of a certain class of high-school students who are intending to go to college, the question arises how it may best be given a place. As my paper indicated, I should answer this question, not by advising the substitution of commercial studies for any part of the already meager and inadequate theoretical course, but by advising the extension of the high-school period so as to include the seventh and eighth elementary grades. And in this I believe that I am in accord with the most trustworthy current opinion. The difficulty is not one in which the middle schools need help from the universities, but one in which they can best help themselves.

I should add that I see no reason why political economy should be regarded as a vocational study any more than physics or chemistry. On the contrary, it is a fundamental theoretical science; and, considering the universal demand for it in American civic life, I believe that it would be an excellent policy to encourage the beginning of its study in the high school.

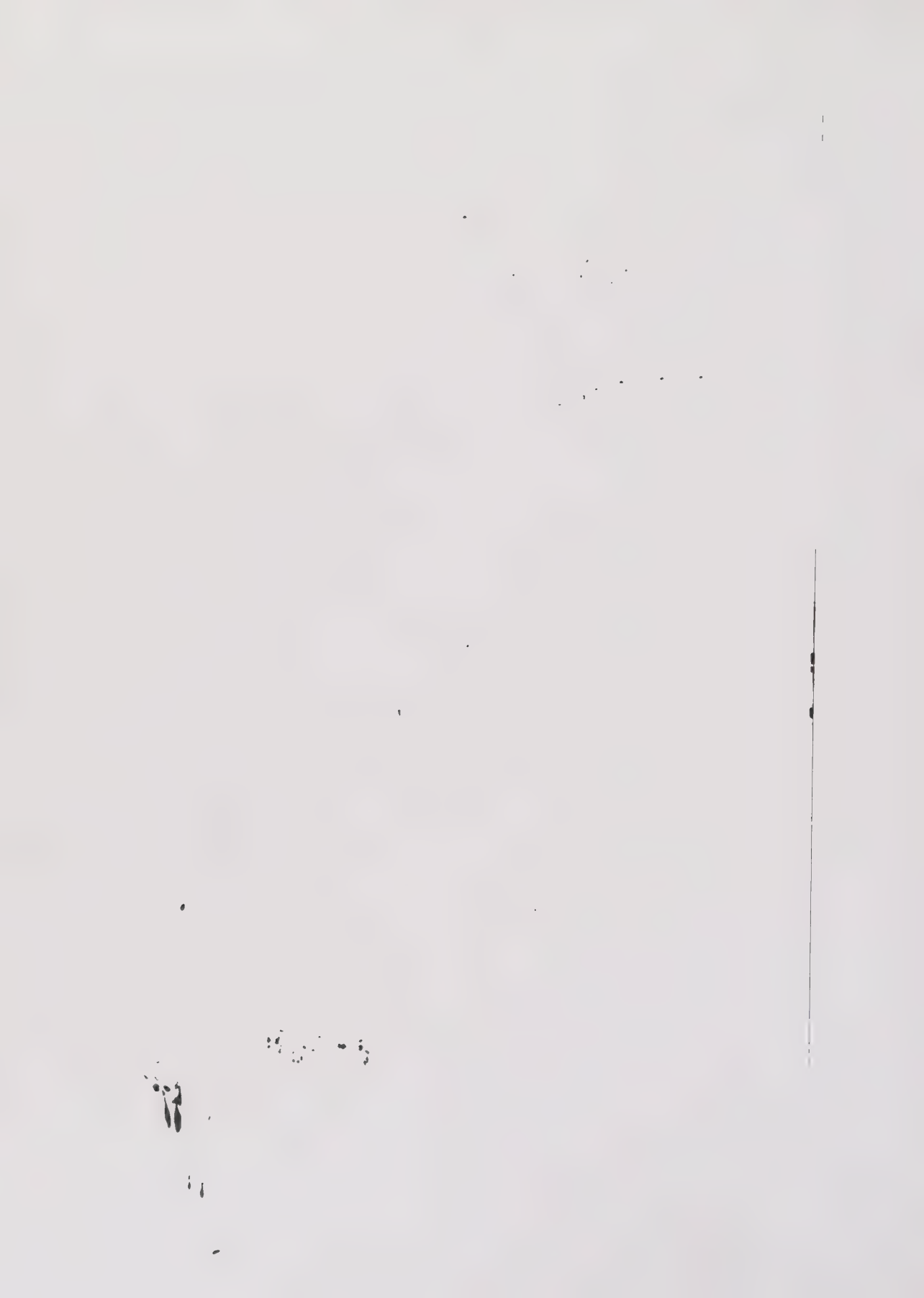
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